

## COLLEGE OF ARTS AND SCIENCES

### PROGRAM OF STUDY

#### Introduction

The College of Arts and Sciences—composed of those departments that comprise the humanities and the arts, the basic sciences, mathematics and computer science, and the social sciences and history—is a community of about 4,000 undergraduates and 600 faculty members. The college emphasizes individual choice and responsibility, imaginative curricula, and development of critical thinking and writing. The college is also a graduate school and research center attracting faculty whose research and scholarly and creative writing require first-rate academic facilities and who bring to all their students the profound questioning and the current ideas of contemporary scholarship. Finally, the college exists within a university of about 18,000 students and 1,630 faculty members, and this wider community provides depth and diversity of applied and professional studies beyond what one undergraduate college alone can offer. Students may draw upon the knowledge and facilities of the other undergraduate colleges at Cornell to supplement their studies. Abundant variety and outstanding quality among many fields, including interdisciplinary fields, give the college its distinctive character.

The richness of the curriculum is extraordinary; there is no course that all students must take, and there are nearly two thousand from which they may choose. By choosing courses each semester, students design their own education. They strike a balance between developing known interests and exploring new subjects. They sharpen their verbal and quantitative skills. They also come to understand more thoroughly the Western tradition and learn something about the non-Western world and its peoples. An education in the liberal arts means honing one's critical capacities, learning more about oneself in nature and culture, and gaining real experience with views of the world radically unlike one's own. All this is highly individual, and the college relies on each student and faculty adviser to select sensible, challenging, and appropriate courses.

Yet the faculty believes that each student's education should have certain common qualities. These include familiarity with several different ways of knowing that are reflected in the natural sciences, in the social sciences, and in those achievements of intellect and imagination that are the focus of the humanities and the arts. In addition to these general areas of knowledge, students study foreign languages, acquire effective writing and quantitative skills, and concentrate on one particular field to develop, as fully as possible, the powers of imaginative and critical thinking. To accomplish these objectives, the college has certain requirements for graduation.

#### Summary of Basic College Requirements for Graduation

- 1) Freshman Writing Seminars: two courses. (See "John S. Knight Writing Program," p. 563.)
- 2) Foreign language: proficiency in one language or qualification in two. (See below.)
- 3) Distribution requirements. (See below.)
- 4) Breadth requirement. (See below.)
- 5) Major. (See below.)
- 6) Electives: four or five courses (at least 15 credits) in courses not used to fulfill other requirements and not in the major field.
- 7) Residence: eight full-time semesters, unless a student can successfully complete all other requirements in fewer than eight semesters and meet the additional criteria to accelerate graduation. (See below under "Acceleration.")
- 8) Minimum number of courses: thirty-four courses. A two-credit course counts as half a course; a six-credit language course counts as one and one-half courses; a one-credit course does not count toward this requirement. (See below under "Courses and Credits.")
- 9) Credits: a total of 120 academic credits, of which 100 must be taken in the College of Arts and Sciences. (See below under "Non-credit courses.")
- 10) Physical education: completion of the university requirement (two one-credit courses). Please note that physical education credit does not count toward graduation or toward the 12-credit minimum required for good academic standing each semester. (See p. 13.)
- 11) Application to graduate. (See below under "Graduation.")

#### Foreign Language Requirement

The faculty considers competence in a foreign language essential for an educated person. Studying another language helps students understand language itself, our fundamental intellectual tool, and more fully opens another culture for exploration. The sooner a student acquires competence, the more useful it will be. Hence, work toward the foreign language requirement should be undertaken in the freshman and sophomore years. Courses in foreign languages and/or literature are taught in the College of Arts and Sciences by the following departments: Africana Studies and Research Center, Asian Studies, Classics, German Studies, Modern Languages, Near Eastern Studies, Romance Studies, and Russian Literature.

The language requirement may be satisfied in one of two ways:

- 1) by attaining *proficiency* in one language  
or
- 2) by attaining *qualification* in two languages.

#### Proficiency

Proficiency may be attained in some languages by passing an intermediate (usually 200-level) Cornell course (or Chinese or Japanese 161). Some introductory language courses are taught at the 300- or 400-level (for example, Near Eastern Studies 333-334); these do not confer proficiency. Proficiency can also be earned by examination. A score of 4 or 5 on an AP language exam earns three credits but does not carry with it proficiency. However, a student who received a score of 4 or 5 on an AP language exam can earn proficiency and an additional three credits by scoring high enough on the CASE (Cornell Advanced Standing Examination), which is given during orientation week. On the other hand, a score of 4 or 5 on an AP *literature* exam in French, German (German offers a combined language/literature exam), or Spanish earns proficiency, as well as three credits. Such students should also take the CASE to see if they can earn an additional three credits. Students with appropriate scores on Cornell Language Placement tests or SAT II examinations are also eligible to take the CASE (see chart below).

#### Qualification

Qualification may be attained in any of the following ways:

- 1) Three years of high school study in any one language gives qualification in that language. No demonstration of competence is necessary. Note, however, that this route to qualification does not guarantee entrance into an intermediate level course. Students who want to continue studying the language must be placed in the appropriate course by an examination. Being placed below the intermediate level does not cancel the qualification.
- 2) Passing the requisite Cornell course: 102, 123, or 134 in most languages taught by the Department of Modern Languages; Chinese 110, 112, or 114; Japanese 160; Korean 102 or 110; Near Eastern Studies 102 or 122 in Hebrew, 112 in elementary Arabic; Classics 103 or 104 in Greek, 106 or 107 in Latin; 132 in Sanskrit; AS&RC 134 in Swahili.  
Note: Except in the case of Sanskrit, completion of language sequences 131-132 does not constitute qualification.
- 3) A score of 600 in French, 580 in German, and 590 in Italian or Spanish on the SAT II taken in high school or a score of 56 or higher on the appropriate Cornell LP (Language Placement) test.

Students may earn a score of 56 on the placement test at the end of a course numbered 122 (second semester of the introductory sequence) and consequently attain *qualification* without taking 123, the third semester of the introductory sequence. However, with a score of 56, it may be worthwhile to take 123.

- 4) By departmental or (when no placement test is available) individual examination at Cornell.

### Placement In Language Courses and Advanced Placement Credit

Placement into language courses and advanced placement credit are separate results of examinations.

#### Placement

Entering students who have had two or more years of high school study in a language, who have been awarded credit for language work at another college or university or who are native speakers, bilingual, or have spoken the language at home, may enroll in a course in the same language only after being placed by examination. The placement exam may have been taken in high school (SAT II, taken after the last course, or AP, if the score was 4 or 5) or at Cornell (LP test). Students may, but need not, retake a language test if a year or more has passed since last taking it. Being placed into a 200-level course does not earn credit toward the degree. Credit is earned only for high school work equivalent in level to language courses numbered 200 and above at Cornell.

### Placement Tests and Advanced Placement Credit

The type of test depends upon the language and the student's level of achievement:

- 1) Eight languages offer scheduled placement and advanced standing tests at the beginning of each semester: Chinese, French, German, Italian, Japanese, Korean, Russian and Spanish. The schedule is available from the Department of Modern Languages, 203 Morrill Hall; it is also posted on the Web at: <http://dml.cornell.edu/html/place/testschedule.html>. Please note that the advanced standing examination in French, German, Italian, Russian, and Spanish, is called the CASE: Cornell Advanced Standing Examination. Eligibility for the CASE may be determined from the placement tables below. In Russian only, *all* students seeking placement take the CASE.

Native speakers of Spanish who have completed their secondary education in a Spanish-speaking country do not take the CASE. For these students, the Spanish program offers a walk-in service, the Native Language Accreditation for Spanish, in the third week of September and the first week of February. Students interested in this service should contact either David Cruz de Jesús or Eleanor Dozier in 323 Morrill Hall. Spanish-English bilinguals who do not fit the definition of "native speakers," and whose test scores make them eligible, should take the CASE.

- 2) Arabic: departmental examination, Department of Near Eastern Studies, 360 Rockefeller Hall.
- 3) Greek, Ancient and Modern: departmental examination, Department of Classics, 120 Goldwin Smith Hall.
- 4) Hebrew: departmental examination, Department of Near Eastern Studies, 360 Rockefeller Hall.
- 5) Latin: departmental examination, Department of Classics, 120 Goldwin Smith Hall.
- 6) Other languages: consult the list of contact persons, available from the Department of Modern Languages, 203 Morrill Hall; it is also posted on the Web at: <http://dml.cornell.edu/html/place/contacts.html>

#### French

##### Placement Tests

| LPF   | SAT II        | Language Courses | Literature Courses          |
|---|---------------|------------------|-----------------------------|
| below 37  | below 410     | 121              |                             |
| 37-44   | 410-480       | 122              |                             |
| 45-55   | 490-590       | 123              |                             |
| 56-64   | 600-680       | 200              |                             |
|   |               | 203              |                             |
|   |               | 205              |                             |
|   |               | H Adm 266        |                             |
| 56-59   | 600-630       |                  | 201                         |
| 60 and above  | 640 and above |                  | 220                         |
|   |               |                  | 221                         |
| 65 and above  | 690 and above |                  | CASE required for placement |
| AP 4 or 5 in language, 3 credits.                   |               |                  | CASE required for placement |
| AP 4 or 5 in literature, 3 credits and proficiency. |               |                  | CASE required for placement |

#### German

##### Placement Tests

| LPG                                   | SAT II        | Language Courses | Literature Courses          |
|---------------------------------------|---------------|------------------|-----------------------------|
| below 37                              | below 370     | 121              |                             |
| 37-44                                 | 370-450       | 122              |                             |
| 45-55                                 | 460-570       | 123              |                             |
| 56-64                                 | 580-670       | 200              | 200                         |
|                                       |               | 205              |                             |
| 65 and above                          | 680 and above |                  | CASE required for placement |
| AP 4 or 5, 3 credits and proficiency. |               |                  | CASE required for placement |

#### Italian

##### Placement Tests

| LPI   | SAT II        | Language Courses | Literature Courses              |
|---|---------------|------------------|---------------------------------|
| below 37  | below 370     | 121              |                                 |
| 37-44   | 370-450       | 122              |                                 |
| 45-55   | 460-580       | 123              |                                 |
| 56-64   | 590-680       | 203              | 201                             |
| 65 and above  | 690 and above |                  | CASE recommended for placement* |
| AP 4 or 5 in language, 3 credits.                   |               |                  | CASE recommended for placement* |
| AP 4 or 5 in literature, 3 credits and proficiency. |               |                  | CASE recommended for placement* |

\* Students who have a score of 65 or higher on the LPI, or 690 or higher on the SAT II, or an AP score of 4 or 5 may enroll in Italian 201 or 203 without taking the CASE.

#### Spanish

##### Placement Tests

| LPS   | SAT II        | Language Courses | Literature Courses              |
|---|---------------|------------------|---------------------------------|
| below 37  | below 370     | 121              |                                 |
| 37-44   | 370-450       | 112              |                                 |
|   |               | 122              |                                 |
| 45-55   | 460-580       | 123              |                                 |
| 56-64   | 590-680       | 200              | 201                             |
|   |               | 203              |                                 |
|   |               | 213              |                                 |
| 65 and above  | 690 and above |                  | CASE recommended for placement* |
| AP 4 or 5 in language, 3 credits.                   |               |                  | CASE recommended for placement* |
| AP 4 or 5 in literature, 3 credits and proficiency. |               |                  | CASE recommended for placement* |

\* Students who have a score of 65 or higher on the LPS, or 690 or higher on the SAT II, or an AP score of 4 or 5 may enroll in Spanish 200, 201, 203 or 213 without taking the CASE.

## Language Requirement Exemptions and Substitutions

Outright waivers of the requirement are never granted. However, if appropriate, alternative courses are arranged. Legitimate requests for exemptions require evidence of inability to learn foreign languages in a classroom setting. Most students provide documentation of learning disabilities relating to foreign language acquisition (e.g., an auditory processing problem) to Joan Fisher in the Office of Equal Opportunity, 234 Day Hall, 255-3976. Other students who may never have been tested for a disability reveal it through repeated and dedicated but vain attempts in formal language courses. A poor grade in a Cornell introductory language course or taking the LP exam repeatedly and unsuccessfully are not adequate evidence.

Students who wish to request a substitution for the normal requirement should meet with Dean Walbridge, Office of Admissions, 172 Goldwin Smith Hall. If Dean Walbridge determines that the request has merit, the student then meets with the Language Substitution Review Committee in the Department of Modern Languages. This committee makes the final decision for or against a substitution. If a substitution is allowed, it then works with the student on selection of substitute courses.

## Distribution Requirements

In satisfying the distribution requirements, students become acquainted with a broad range of subject matter and points of view in the college and liberal arts and sciences, and they explore areas that may be entirely new to them. Although students may complete the requirements over the eight semesters, they can take advanced courses in many subjects they find intriguing only if they have previously completed the introductory prerequisites.

Students must take a total of nine courses (of three or more credits each) for the distribution requirements: four courses from Groups 1 and 2 below, at least two of which are from Group 1 and at least one of which is from Group 2 (for example, one chemistry, one physics, one geology, and one mathematics); five courses from Groups 3 and 4 below, with at least two in each group and two in the same department (for example, one course in sociology, one in history, one in history of art, and two in theater arts).

### 1. Physical and Biological Sciences

In fulfilling the science distribution requirement, students must take at least one course from the primary list of courses and may select additional courses from the supplementary list.

#### Primary list:

Astronomy: all courses *except* 233

Chemistry: all courses

Geological Sciences: all courses

Physics: all courses

Biological Sciences: all courses *except* 152, 200 (unless permission of the associate director is obtained), 208, 209, or 367. The following courses are especially suitable for the distribution requirement because they have no prerequisites: 101–104, 105–106, 107–108, 109–110, 154, 170, 184, 192, 202, 207, 212,

240, 241, 264 plus 266, 275. *Note that introductory biology can count for distribution only when completed as a two-semester sequence: 109–110, 105–106, or 101 and 103 plus 102 and 104, or 107–108, or a combination of the first term of one sequence and the second term of another.*

#### Supplementary list:

Animal Science: 100, 150, 212

Anthropology: 101, 208, 275, 371, 390, 474, 490

Applied and Engineering Physics: 110

Biology and Society: 301

Entomology: 212

Food: 200

Materials Science and Engineering: 277

Natural Resources: 201, 210, 301

Nutritional Science: 115

Plant Breeding: 225

Plant Pathology: 301

Psychology: 223

Soils, Crops, and Atmospheric Sciences: 131, 231

### 2. Quantitative and formal reasoning

Biometry and Statistics: 215

City and Regional Planning: 320

Computer Science: 100, 211, 212

Economics: 319, 320, 321

Industrial & Labor Relations: 210, 211

Linguistics: 216

Mathematics: all courses *except* 101 and 109

Operations Research & Industrial Engineering: 115

Philosophy: 231, 331, 431, 436

Physics: 205, 209, 210

Psychology: 350

Sociology: 301

If students choose two courses from this list to satisfy part of the distribution requirement, those two courses may not have significant overlap. For example, students may not choose two beginning courses in statistics.

Under exceptional circumstances and upon petition, certain Cornell courses not listed above under Group 2 (courses such as those appearing on the following auxiliary list) may be used to satisfy the requirement in quantitative and formal reasoning. The petition should provide a persuasive rationale both in terms of the student's course of study and in terms of meeting the goals of the requirement.

**Auxiliary list:** Agricultural Economics 310; Agricultural Engineering 151; City and Regional Planning 321; Industrial and Labor Relations 312; Linguistics 421, 450; Psychology 472–473 (a sequence of two two-credit courses which may count only in its entirety as one course)

### 3. Social sciences and history

Africana Studies: 171, 172, 191, 204, 205, 220, 231, 271, 280, 283, 290, 300, 301,

311, 352, 370, 380, 381, 410, 420, 451, 459, 475, 478, 479, 483, 484

American Studies: 101, 102, 201, 202, 320

Anthropology: all courses *except* 101, 208, 275, 371, 390, 451, 452, 453, 474, 490

Archaeology: 100, 201, 202, 203, 204, 263, 275, 317, 353, 355, 362, 370, 405, 409, 458, 493, 494

Asian Studies: courses in Asian anthropology, economics, government, history, linguistics, or sociology

Biology and Society: 301, 342, 407, 427

City and Regional Planning: 100, 101

Cognitive Studies: 101, 201

Economics: all courses *except* 317, 318, 319, 320, 321

Engineering: 250, 292

Government: all courses

History: all courses

Linguistics: all courses *except* 131, 132, 251, 252, 315, 316

Near Eastern Studies: 244 and all other courses in Near Eastern archaeology and history

Psychology: all courses *except* 223, 307, 322, 324, 326, 332, 350, 361, 396, 410, 420, 422, 424, 425, 429, 431, 440, 441, 470, 471, 472, 473, 475, 478, 479, 491, 492

Religious Studies: 150, 203, 239, 244, 248, 251, 257, 258, 263, 264, 265, 320, 322, 335, 345, 350, 365, 368, 393, 442, 443, 451, 459

Science and Technology Studies: 201,

233, 250, 281, 282, 287, 292, 311, 350,

352, 355, 360, 391, 401, 407, 427, 433,

442, 444, 447, 467, 483, 490, 645, 687

Sociology: all courses

Women's Studies: 206, 210, 214, 218, 220, 227, 234, 238, 244, 269, 273, 277, 281, 285, 305, 307, 321, 344, 353, 357, 362, 368, 380, 384, 406, 408, 426, 438, 442, 444, 450, 455, 458, 459, 466, 467, 477, 478, 479, 493

### 4. Humanities and the arts

Africana Studies: 202, 210, 211, 265, 285, 303, 304, 310, 422, 425, 431, 432, 435, 455

American Studies: 101, 102, 201, 202, 324

Anthropology: 290, 451, 452, 453, 455

Archaeology: 100, 221, 309, 351, 352, 357, 380, 423, 434, 435, 520, 629

Asian Studies: 208, 211, 212, 215, 218 and other courses in Asian art, literature, religion, or culture

Biology and Society: 205, 206

Classics: courses at the 200-level and above in Classical civilization, art, and archaeology; Classical languages at the 200-level and above

Comparative Literature: all courses

English: all courses at the 200-level and above

French Literature: all courses

German Studies: all courses

History of Art: all courses

Italian Literature: all courses *except* 205

Music: one course of at least three credits, *excluding* musical performance, organizations, and ensembles. If a student chooses to satisfy part of the distribution requirement with more than one music course, an acceptable sequence may include four credits in musical performance, organizations, or ensembles combined with introductory, theory, or history and culture courses. (Students may count performance credits as only one course toward distribution.)

Near Eastern Studies: courses in Near Eastern civilization or literature, including 244 and language courses at the 200-level and above

Philosophy: all courses *except* 191 and courses in logic

Religious Studies: 101, 157, 197, 198, 213, 223, 227, 229, 230, 231, 234, 239, 244, 250, 251, 252, 262, 295, 297, 315, 328, 332, 333, 334, 337, 342, 343, 344, 346, 347, 350, 351, 352, 354, 355, 357, 358, 359, 360, 362, 395, 410, 420, 429, 441, 449, 473, 531

Russian Literature: all courses

Science and Technology Studies: 205, 206, 286, 381, 384, 389, 390, 481, 681

Spanish Literature: all courses

Theatre, Film and Dance: all 3- or 4-credit courses at the 200-level or above *except* technical production studios

Women's Studies: 210, 249, 251, 263, 264, 294, 341, 348, 349, 355, 358, 363, 370, 374, 381, 404, 409, 413, 427, 431, 433, 445, 447, 448, 451, 461, 464, 465, 468, 470, 471, 475, 481, 486, 491, 492, 493, 530, 594

### Restrictions on Applying Courses to the Distribution Requirements

- 1) Advanced Placement Credit and Credit from Other Institutions

Students may apply up to two courses of approved advanced placement or transfer credit towards distribution requirements in Groups 1 and 2 (physical/biological sciences and quantitative/formal reasoning), as long as they take at least one course from the primary list in science at Cornell. Transfer credit applied to distribution in Group 2 (quantitative/formal reasoning) must be in mathematics or computer science; it may not be in other quantitative subjects, for example, statistics or logic.

Students may apply no advanced placement or transfer credit from other institutions toward satisfaction of the distribution requirements in Groups 3 and 4 (social sciences/history and humanities/arts).

**Students who transfer to the college from another institution or who enter through the Mid-Year Freshman Program are under the above rules for advanced placement credit, but are eligible to have credit for coursework taken at their previous institution count towards all distribution requirements.** Transfer students receive a detailed credit evaluation when they are accepted for admission.

- 2) Freshman writing seminars may not count towards any distribution requirement.
- 3) No single course may satisfy more than one distribution requirement. However, students may count courses in their major towards distribution. Courses offered or cross-listed by their major department may not be counted towards any distribution category beyond the usual category of the major department itself. For example, a history major may not count a course cross-listed between history and a literature department towards distribution in the humanities.

### Breadth Requirements

Students must include in their undergraduate curricula at least one Arts and Sciences course that focuses on an area or a people other than those of the United States, Canada, or Europe, and one course that focuses on an historical period before the twentieth century. (Arts and Sciences courses about Native American cultures may count toward the geographic breadth requirement if they focus on the cultures themselves and not on interaction with European cultures.) Courses that satisfy the geographic breadth requirement are marked with a @ when described in this catalog. Courses that satisfy the historical breadth requirement are marked with a #. Many courses satisfy both requirements, and students may in fact use the same course to satisfy both. Students may also apply Cornell courses conferring proficiency in a non-Western language toward the geographical breadth requirement and use courses satisfying distribution, major, or elective (but not writing) requirements in satisfaction of either of the breadth requirements. They may not apply advanced placement or credit awarded by examination or, for students matriculating as freshmen (with the exception of students entering through the Mid-Year Freshman Program), transfer credit to either of the breadth requirements.

### The Major

In their last two years, students devote roughly one-half their time to acquiring depth and competence in a major subject. The choice of major does not define a student's intellect or character or lead directly to a lifetime's occupation, although it sometimes does some of each. By majoring, students focus and develop their imaginative and intellectual capacities on a subject they find especially interesting.

Most departments and programs specify certain prerequisites for admission to the major; they are found in the department and program descriptions on the following pages.

Students may apply for acceptance into the major as soon as they have completed the prerequisites. To apply, they take a copy of their transcript to an appointment with the director of undergraduate studies in their prospective major. Students must be accepted into a major before the beginning of the junior year. A department or program may refuse admission into the major if the applicant's performance does not meet established standards. A student without a major at the beginning of the junior year is not making satisfactory progress toward the degree and must meet with an advising dean.

### Available majors

Majors are offered by each of the departments. There are also majors in American studies, archaeology, biology and society, religious studies, Russian and East European studies, and women's studies.

Some students want to pursue an interest that cannot be met within an established major. They may plan, with the help of their faculty adviser, an independent major that includes courses from several departments. See "Independent Major Program," below, under "Special Academic Options."

### Double Majors

Only one major is required for graduation. Some students choose to complete two majors. No special permission or procedure is required; students simply become accepted into both majors and find an adviser in each department. Both majors will be posted on the official transcript.

### Electives

Of the 34 courses and 120 credits required for graduation, almost one-third are free electives. How students use these electives frequently makes the difference between an ordinary and a truly interesting curriculum. Students must complete at least four courses and at least 15 credits offered outside the major field and not used to fill another requirement. AP credits not otherwise used may be used to fulfill elective requirements. Students may group electives to form a concentration separate from their major or even apply them to a second major. Some simply choose to explore a variety of subjects, while others develop a concentration in one particular department or subject outside Arts and Sciences to gain practical training or specialized knowledge.

### Residence

The College of Arts and Sciences is primarily a residential college for students who devote their energy and spirit to full-time study. The faculty believes that integrated, full-time study for a defined period best promotes intellectual and creative development and best prepares people for citizenship and careers.

Consequently, eight semesters of full-time study in the College of Arts and Sciences are integral to earning the A.B. degree. Even if the minimum requirements can be met in fewer semesters, the faculty of the college expects students to take advantage of the resources of the university for eight full terms and obtain as rich and advanced an education in the liberal arts and sciences as possible.

Transfer students from other institutions must spend a minimum of four semesters on the Cornell campus in Ithaca enrolled in the College of Arts and Sciences. Transfers from other colleges at Cornell must spend four semesters on campus in Ithaca as students in the Internal Transfer Division or in the college.

Approved study abroad, SEA Semester, Urban Semester, and Cornell-in-Washington are considered semesters of residence, but not as semesters on the Cornell campus. Nonetheless, students may spend no more than two semesters on such programs and must be on campus during their last semester.



Semesters of extramural study in the Division of Continuing Education and Summer Sessions do not count as semesters of residence.

Students occasionally enter with advanced placement credit from other institutions, take leaves and complete courses at other institutions, or take summer courses at other institutions. The college will accept credit for such courses, if they are comparable to courses offered by departments at Cornell and are approved by those departments (approval forms are available in the Academic Advising Center, 55 Goldwin Smith Hall). Students may not, however, count such credit as part of the 100 credits required in the College of Arts and Sciences or use such credit to replace a term of residence. Students may not leave the college after fewer than eight semesters of residence and complete their undergraduate degrees with credits earned at other institutions or as part-time or summer students at Cornell.

### Acceleration

Some students decide that they do not need eight semesters of residence to obtain a solid undergraduate education. These students should compress the first four semesters and spend four full semesters in the major. Benefitting from opportunities for advanced, seminar, and independent (sometimes honors) work is what best characterizes undergraduate education in the college. Students considering acceleration should discuss their plans with their major advisor.

Accelerants should apply to graduate two semesters before their intended new graduation date. They must obtain an "Application to Graduate" in the Academic Advising Center, 55 Goldwin Smith Hall.

1. Accelerants must meet either condition *a* or *b*:
  - a. Complete 60 credits before the beginning of the last four semesters and complete the prerequisites for admission to the major in time to spend *four* semesters in the major.
  - b. Pass 48 credits in College of Arts and Sciences courses numbered "300" and above. Upper-level courses taken in other colleges at Cornell University may count as College of Arts and Sciences credit only if approved for the major.
2. All accelerants are required to complete 100 credits at Cornell at "C" or above. Courses completed with a grade of "S" will count toward the 100 credits. Advanced placement credits do not count towards this requirement.
3. Students may not use credits earned while on leave of absence to reduce their terms of residence.
4. Accelerants may not finish the degree with credits earned in summer or winter session, through part-time study (unless they meet the guidelines for part-time study), or at an off-campus program, including Cornell-in-Washington, SEA Semester, Urban Semester, or study abroad. That is, they may not exit through any program other than a regular, full-time Cornell semester in Ithaca.

Students matriculating as freshmen may not compress their undergraduate education into fewer than six semesters of residence.

Transfer students, both from other institutions and from other colleges at Cornell, must spend at least four semesters in the college on campus in Ithaca.

### Ninth term

Students who can graduate in eight semesters should do so. If a worthy academic plan for a full ninth or tenth semester is approved, the student enrolls in the college as a special student for the additional work. Such a status allows enrollment in a full schedule of courses for full tuition and full use of campus resources, but allows financial aid only from loans or outside agencies, not from Cornell funds. Students who need only a part-time schedule of courses in a ninth or tenth term in order to graduate should complete the outstanding courses as part-time students paying pro-rated tuition. Students may spend a ninth term with Cornell aid only with permission of the dean of seniors or the Committee on Academic Records. Such permission is normally granted only to:

1. Students who have been ill or have an exceptionally compelling academic plan.
2. Students attracted late to a field with a hierarchical curriculum (for example, physics).
3. Students who were academically under-prepared for the curriculum at Cornell and needed to begin with a lighter schedule of courses than normal. (See Dean Turner, Academic Advising Center, 55 Goldwin Smith Hall, about this option.)

### Part-time Study

Students in good academic standing may take a personal leave of absence and enroll in the Division of Continuing Education, but such semesters of part-time study do not count as terms of residence and credits from such semesters may not be used to reduce the terms of residence.

### Part-time study in special circumstances

The college and university support students (with aid and services) as best they can to make full-time study possible. Rarely and occasionally, however, extraordinary but non-financial personal, academic, or medical circumstances make becoming a part-time student necessary and appropriate. Students in good academic standing who face extraordinary situations or who have documented disabilities may petition the Committee on Academic Records for part-time status and proration of tuition in the college.

Students requesting part-time status should discuss their situation with Dean Walbridge if their reason is a documented disability that, under the Americans with Disabilities Act, requires appropriate accommodations. Otherwise, students should meet with the dean of their class.

### Part-time study in final semester

Students may complete their degrees as part-time students at Cornell after fewer than eight semesters of full-time residence only if:

- 1) They have completed all requirements by the end of the sixth or seventh term, met the criteria for accelerated graduation, and are remaining to complete study beyond what is required for the degree.

- 2) They have received permission to accelerate, but have been forced to drop or delay a course for reasons beyond their control.
- 3) They are writing an honors thesis in the eighth semester and can complete all degree requirements by taking two courses, one of which is the thesis itself. They must register for the thesis and at least one additional course.

In all cases, approval of the dean of seniors must be sought in the semester *prior* to the part-time semester and the student must be enrolling for no more than 8 credits.

## Courses and Credits

### Counting courses and credits

Students must complete at least 34 courses to graduate—that is, an average of four courses during each of six semesters and five courses during each of two semesters. A three- or four-credit course counts as one course; a two-credit course counts as one-half course. Single-credit courses do not count as part of the 34 except in certain cases when they form a part of a series and two in the same series can be aggregated to count as one-half course (certain offerings in the Departments of Music and of Theatre, Film and Dance). Three one-credit courses do not aggregate to count as one course. A six-credit language course counts as 1 1/2 courses, while the summer Falcon Programs in Asian languages count as ten credits and 2 1/2 courses each. Archaeology and geology fieldwork for more than six credits count as two courses each. Biology 281 counts as 1 1/2 courses. Other five- or six-credit courses count as one course. AP exam scores that result in an award of 3 or 4 credits count as one course; those in language that result in 6 credits count as 1 1/2 courses; those in biology that result in 6 credits count as two courses; those that result in an award of 8 credits count as two courses.

Students must also complete 120 credits, 100 of which must be from courses taken in the College of Arts and Sciences. Liberal arts courses approved for study abroad during a semester or academic year of full-time study (not summer study) and courses taken in certain off-campus Cornell residential programs may be counted toward the 100 credits required within the college and also toward the required 34 courses. Credits earned in other colleges at Cornell, or in any subject at U.S. institutions other than Cornell, do not count as part of the 100 nor, for students matriculating in Fall 1994 or after, do advanced placement credits count as part of the 100. The only exceptions are for courses (usually no more than three) that certain departments accept from other colleges at Cornell as fulfilling major requirements and for no more than two courses that an advisor accepts as part of a completed and established cross-college, inter-disciplinary concentration.

### Using courses towards more than one requirement

A course may fulfill more than one college requirement, under the following conditions:

- 1) A course may be used to fulfill a distribution requirement and also a major requirement.
- 2) A one-semester course in foreign literature (not language) that is acceptable

for achieving proficiency in that language may also be used as a partial fulfillment of the distribution requirement in the humanities and the arts.

- 3) Courses may count toward breadth requirements and toward any other requirement except Freshman Writing Seminars.
- 4) Courses in a second major may count as electives.

#### Auditing

The college encourages its students to take advantage of its rich curriculum by sitting in on courses that interest them but that they cannot commit themselves to for credit. As long as the instructor agrees, students are welcome to visit courses. Small seminars and language courses are sometimes not open to visitors. Audited courses do not appear on the student's schedule or transcript.

#### Repeating courses

Students occasionally need to repeat courses. If the instructor certifies that the course content has been changed, credit will be granted a second time. If the content has not changed, both grades will appear on the transcript and will be included in any average that is calculated, but credit will be counted toward the degree only once; students considering repeating a course under this circumstance should discuss the matter with an advising dean. Students who plan to repeat a course submit a petition to the college registrar. If the original course grade was F, no petition is necessary.

#### Non-credit courses

The college does not grant credit toward the degree for every course offered by the university. Courses in remedial or developmental reading, high school mathematics, supplemental science and mathematics offered by the Learning Skills Center, keyboarding, shorthand, military training, training as emergency medical technician and service as a teaching assistant are among those for which credit is not given and that do not constitute part of the 12 credits required for good academic standing. Students enrolled in Biology G 498 may petition once to have the non-degree credits count towards good academic standing.

Examples of non-credit courses:

All courses numbered below 100 (with the exception of Computer Science 099)

All courses in Military Science, Naval Science, and Aerospace Studies

A&LS 134

Biology G 498

Communications 498

Education 498

Hotel Administration 170

Human Development and Family Studies 403

Human Ecology 100, 101

Human Service Studies 403

Mathematics 109

Nutritional Science 403

Psychology 498

#### Advanced placement credit

See p. 5. Advanced placement credit counts as part of the 120 credits and 34 courses required for the degree. It does not count as part of the 100 credits required in Arts and Sciences; its application to distribution requirements is restricted, as explained above under Distribution.

#### Summer session credit

A student may earn credit toward the degree by completing courses in Cornell's summer session or by petitioning to take summer courses at other colleges. Students should consult their advisers regarding summer study plans.

Credit for summer courses not taken at Cornell must be approved by the appropriate Cornell department. Approval forms and information are available in the Academic Advising Center, 55 Goldwin Smith Hall and from Robin Perry, Office of Admissions, 172 Goldwin Smith Hall. Credit earned in summer courses other than those at Cornell will not count toward the 100 credits required in the college (including summer or orientation programs abroad) and may be applied only to part of the Group 1 and 2 distribution requirements. Transcripts from other institutions must be sent to Robin Perry, 172 Goldwin Smith Hall.

Entering students who want to receive credit toward the degree for courses completed during the summer before matriculation in a summer session away from Cornell should obtain approval forms as soon as possible and have transcripts sent to Robin Perry, 172 Goldwin Smith Hall, during the summer before matriculation. Credits completed in Cornell summer sessions will be awarded automatically.

Summer session at Cornell or elsewhere does not count toward the eight-semester residence requirement.

#### Transferring credit earned away from Cornell while on leave of absence

Students may petition to transfer credits from other accredited institutions for work completed while on leave of absence. Petitions are available in 55 and 172 Goldwin Smith Hall. The relevant department will decide whether the course is comparable in quality to Cornell courses. Credit approved for transfer counts as part of the 120 required for graduation and as part of the 34 courses. It does not count among the 100 credits required in Arts and Sciences and cannot be used toward graduation in fewer than eight semesters. Its application to distribution and breadth requirements is restricted as described above under Distribution.

#### Transferring credit (for transfer students from another institution or from another Cornell college)

Transfer students must successfully complete at least 60 credits and 16 courses at Cornell; they must be in residence in the college for four regular semesters (summer session does not count toward the residence requirement). The college evaluates credit earned either at another school or college at Cornell University or at another accredited institution of collegiate rank, including advanced placement credit awarded by those colleges, and determines the number of credits and courses the student may apply toward the various requirements for the Bachelor of Arts degree

at Cornell. Evaluations of transfer credits are normally provided when students are notified of their admission.

#### Physical Education

See "University Requirements for Graduation," p. 13. The college does not count physical education credit toward the 120 credits required for graduation, nor toward the twelve credits required for good academic standing each semester.

## SPECIAL ACADEMIC OPTIONS

### Degree Programs

The following five programs allow students to work toward more than one degree or to alter the regular college or major requirements.

#### Independent Major Program

The Independent Major Program allows students to design their own interdisciplinary majors to pursue a subject that cannot be found within an established major. Proposals for an independent major must be equivalent in coherence, breadth, and depth to a departmental major, well suited to the student's academic preparation, and consistent with a liberal education. Proposals must also be supported by a faculty adviser and are assessed by a board of faculty members. Independent majors substitute for established majors, but students must still satisfy all the other requirements for the baccalaureate degree. Students should contact the director of the Independent Major Program, Academic Advising Center, 55 Goldwin Smith Hall, for further information. Deadlines for submitting independent major proposals are listed below on the calendar supplement for the College of Arts and Sciences.

#### College Scholar Program

The College Scholar Program frees up to forty students in each class from the usual college requirements for a degree and allows them to design their own curricula. It is meant to serve students whose interests and talents would benefit from a little more academic freedom than other students have, who demonstrate exceptional promise, and who show the maturity to plan and carry out, with the help of their adviser, a well-designed program of studies. College Scholars do not all design the same kind of program: some, for instance, pursue diverse interests, while others integrate a variety of courses with a common theme.

College Scholars must complete 120 credits of course work (100 in the college), 34 courses, and, unless they receive permission from the program to accelerate, eight full terms of undergraduate study. They must complete the physical education requirement. All College Scholars must complete a senior project. They are not required to complete or fulfill the general education requirements, although members of the College Scholar Advisory Board believe that the spirit of the college requirements is a good one.

Each applicant to the College Scholar Program is asked to write an essay, which is due the last Wednesday in April of the freshman year. Mid-year freshmen apply by that date in their first spring semester in the college. Students should contact the Academic Advising Center,

55 Goldwin Smith Hall, for further information.

### Dual-Degree Program with Other Colleges

The Dual-Degree Program enables especially ambitious undergraduate students to pursue programs of study in two colleges. Dual-degree candidates may earn both a Bachelor of Arts degree from the College of Arts and Sciences and (1) a Bachelor of Science degree from the College of Engineering or (2) a Bachelor of Fine Arts degree from the Department of Art in the College of Architecture, Art, and Planning or (3) a Bachelor of Science degree in urban and regional studies from the Department of City and Regional Planning in the College of Architecture, Art, and Planning or (4) a Bachelor of Science degree in architectural history from the Department of Architecture in the College of Architecture, Art, and Planning. Students enter one of these colleges as freshmen or sophomores and begin the Dual-Degree Program with the second college in the second or, in some cases, the third year. The Dual-Degree Program ordinarily takes five years to complete, and students are eligible for five years of financial aid. For further information contact the Office of Admissions, 172 Goldwin Smith Hall.

### Double Registration with and Early Admission to Professional Schools

Registration in the senior year of the College of Arts and Sciences and the first year of Cornell Law School, Cornell Medical College, or the Johnson Graduate School of Management, is possible. A very few exceptionally well-prepared students who have earned 105 credits before the start of the senior year and have been accepted by one of the above-named professional schools may be permitted to register simultaneously in the college and in one or another of these professional schools during the seventh and eighth terms. They earn the A.B. degree after the first year of professional school.

Students with eight or fewer credits and two or fewer courses to complete may apply to enter the Master's of Engineering program during (but no earlier than) the eighth semester; dual-degree students may enter this program no earlier than the ninth semester. They earn the bachelor degree(s) after one semester of graduate school.

Students interested in the joint program with the Law School or the Graduate School of Management, or in early admission to the Master's of Engineering program should apply to the relevant program. Students interested in the joint program with Cornell Medical College should contact the health careers coordinator, 203 Barnes Hall. All candidates should confirm their eligibility with the dean of seniors, Academic Advising Center, 55 Goldwin Smith Hall.

Double-registered students must, of course, complete all requirements for the A.B. degree, including 100 credits in Arts and Sciences courses.

### Teacher Education in Science and Mathematics

Students at Cornell may pursue teaching credentials in biology, chemistry, earth science, general science, mathematics, and physics. Teacher Education in Science and Mathematics (TESM) is a university program jointly conducted by the departments of

education and mathematics. Although TSM offers options for undergraduate and graduate study, most students enroll in a five-year program, which combines an undergraduate major in mathematics or one of the sciences with a one-year Master of Arts in Teaching degree (MAT). Students from any college at Cornell are eligible to apply to the program as undergraduates, usually during their sophomore year.

For more information, contact the TSM student support specialist at 255-9255 or the program coordinator, D. Trumbull, 255-3108.

### Special-Interest Options

The following options do not alter the college's requirements but enable students to pursue special interests within the usual programs.

#### Informal Minors

Some students organize electives within a discipline or department. Such informal minors can be developed with the help of the departmental directors of undergraduate studies, but are not noted on the transcript.

#### Concentrations

Established interdisciplinary concentrations, described in the pages following the descriptions of the departments and their curricula, provide structures for organizing electives. Completed concentrations are noted on the transcript.

#### Independent Study

Independent study affords students the opportunity to pursue special interests or research not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the independent course, must approve the program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study (proposal forms are available in the Academic Advising Center, 55 Goldwin Smith Hall). In one semester students may earn up to six credits with one instructor or up to eight credits with more than one instructor.

#### Undergraduate Research Program

An excellent way to benefit from being an undergraduate at a research university and at Cornell in particular is to become an apprentice in on-going faculty research. About 400 students participate each year in creating new knowledge and earn independent study credit for what they learn and contribute. They sharpen their critical and creative abilities and can test their interest in pursuing a research career. Sometimes they publish their work.

The Undergraduate Research Program gathers information about research opportunities in most disciplines of the liberal arts and sciences, guides students in finding further opportunities—both on campus and elsewhere, and both during the academic year and during the summer—and helps students prepare for research and present themselves as candidates for apprenticeships. Other students locate research opportunities independently through faculty whose courses they have taken, through their major departments, or through published materials.

The Cornell Undergraduate Research Board, an undergraduate organization, conducts an annual open house to help students get started in research and an annual forum at which undergraduates present their work.

Students interested in this program should see Dean Williams, Academic Advising Center, 55 Goldwin Smith Hall.

#### Language Study

**FALCON (Full-Year Asian Language Concentration).** FALCON allows students who are interested in the Far East to study Chinese, Indonesian, or Japanese exclusively for one year. They gain proficiency in the language and familiarity with the culture. Students who are interested in the Far East should be aware of the opportunities here to pursue rapid and thorough beginning studies on campus with the objective of studying abroad later—in China, Japan, or Southeast Asia. Students interested in this program should contact the Department of Modern Languages, 203A Morrill Hall (607-255-4298; e-mail: falcon@cornell.edu).

#### Language House Program

A complement to classroom cultural and linguistic instruction, the Language House Program combines residential and academic opportunities for developing and practicing conversational skills in French, German, Italian, Japanese, Mandarin Chinese, Russian, and Spanish. It helps prepare students who plan to study abroad and helps returning students share their cultural experiences while further increasing their language skills. Students interested in this program should see Academic Administrator Daniel Evett, 136 Goldwin Smith Hall.

#### Prelaw Study

Law schools neither require nor prefer any particular program of study; they do seek students with sound training in the liberal arts and sciences. It is important that students plan a program in which they are interested and do well. Beyond that, students are advised to take courses that will develop their powers of precise, analytical thinking and proficiency in writing and speaking.

The college offers a concentration in law and society. Students should work toward completion of this concentration because they find it interesting, not because they believe it will convince law schools of their interest.

The adviser for students in the College of Arts and Sciences who are applying to law school is Dean Cox, Office of Admissions, 172 Goldwin Smith Hall.

#### Premedical Study

The breadth and depth afforded by a liberal arts education are invaluable for people who plan medical careers, whether they intend to practice or go into research. Such training has a profound effect on the doctor's usefulness to patients, and it affords the flexibility of mind that is needed for major research undertakings. Medical and dental schools do not prescribe or even prefer a particular major; they do, however, require particular undergraduate courses, and most students are well advised to begin chemistry in their freshman year. Students who are interested in medical careers are urged to visit the Health Careers Office, 203 Barnes Hall.

The adviser for students in the College of Arts and Sciences who are planning careers in medicine is Dean Turner, Academic Advising Center, 55 Goldwin Smith Hall.

### Off-Campus Programs

Many students find it important to their majors or to their overall academic programs to study off campus or abroad for one or two semesters. When it makes academic sense, the college encourages its students to pursue such studies and grants credit toward the degree for work satisfactorily completed.

### Study Abroad

All students planning to study abroad apply through Cornell Abroad; please see the Cornell Abroad program description in the introductory section of Courses of Study.

Each year about 200 undergraduates in Arts and Sciences include semester- or year-long study abroad as part of their formal undergraduate education. Ideally, study abroad builds upon a broad liberal arts background in the early semesters: area studies, language training, and preparation in the proposed field of study are all essential.

**The college encourages wherever possible study at foreign institutions alongside their degree candidates rather than study in self-contained programs that offer courses specially designed for foreigners.**

The primary goals of this educational immersion are to learn firsthand the modes of inquiry, methods of analysis, and educational values of higher education offered to students of another country and to involve students in social relationships with peers who may hold a new and unexpected range of social attitudes.

Many students go abroad to pursue work in their majors. Focused academic work in an appropriate institution abroad can prepare students for advanced study or honors work in the final semesters back in Ithaca.

The college advocates study abroad that enables students to become competent enough in another language to experience daily life, develop social relationships, and accomplish formal course work in that language. **Students who intend to study abroad in a country where the host language is not English must demonstrate a serious commitment to learning the language through course work before studying abroad; proficiency in the language is generally the prerequisite.** At least one area studies course or one course in the history, culture, economics, politics, or social relations of the country of destination must be part of every student's preparation for study abroad.

Students planning to study abroad need solid academic credentials to do so productively and successfully. The college requires a minimum overall GPA of 3.0 for all Cornell course work and good academic standing in the semester immediately before going abroad.

Study abroad is possible during the sophomore and junior years or during the first semester of the senior year. Study abroad in the final semester is rarely approved. Important steps to prepare for study abroad include

- substantial progress with college distribution requirements;
- admission to a major and a faculty adviser in the major;
- clear academic agenda for study abroad;
- appropriate study of the country or region of destination, especially language study.

Study abroad can earn up to 15 liberal arts and sciences credits per semester of full-time course work as long as the curriculum abroad is consistent with that of the college. A maximum of 10 credits is awarded for each trimester of study. Courses that fall outside the scope of the liberal arts and sciences may earn non-Arts credits. Students must carry a full course-load as defined by the host institution. Students may spend up to two semesters abroad. Only those with compelling academic reasons may study in more than one location over two semesters. The college does not approve study abroad that tours more than one country or that is more touristic than scholarly in content and structure. Students must continue study of the host language while abroad. Only in exceptional circumstances will the college approve programs which, in non-English speaking countries, provide no language training.

All courses taken abroad will appear on the Cornell transcript and grades earned are reported in the system of the host institution. Grades earned through course work abroad do not, however, become part of the Cornell GPA.

Students who transfer to Cornell must complete a minimum of four semesters of residence on campus in Ithaca and may not study abroad during one of those four semesters.

Applications to study abroad must have the support of a faculty adviser in the major and the approval of Dean Terrell in the Academic Advising Center, 55 Goldwin Smith. Although students investigate options for study abroad and submit final applications through the Cornell Abroad office, Arts and Sciences applicants submit to the college an essay describing the academic rationale for study abroad, an outline of prospective courses to be taken and any other relevant materials.

### Summer Residential Programs in Archaeology

During the summer months students may participate in a Cornell-sponsored archaeological project. In recent years the program has organized archaeological projects in Central America, Greece, Israel, Italy and New York State. Students should contact the Archaeology Program for information about the sites currently available.

### Marine Science

Shoals Marine Laboratory is a seasonal field station that offers a variety of courses and experiences designed to introduce undergraduates to the marine sciences. The laboratory is located on Appledore Island, six miles off the Maine/New Hampshire coasts. Students should contact the Division of Biological Sciences for further information.

### Cornell-in-Washington

The Cornell-in-Washington program offers students from all colleges within the university an opportunity to earn full academic credit for

a semester in Washington, D.C. Students take courses from Cornell faculty, conduct individual research projects, and work as externs. The Cornell-in-Washington program offers two study options: 1) studies in public policy, and 2) studies in the American experience. The program also offers unique externship opportunities: students serve as externs in a federal agency, congressional office, or non-governmental organization and take part in a public policy or humanities seminar. They define and carry out individual research projects under the supervision of Cornell faculty. Potential externships are arranged through, and approved by, the Cornell-in-Washington program. For further information, see p. 19 or inquire at 471 Hollister Hall, 255-4090. Seniors who wish to study in Washington during their final semester must petition the college for permission to do so; they should first consult with the dean of seniors, Academic Advising Center, 55 Goldwin Smith Hall, 255-5004.

### Fieldwork

Sometimes it is appropriate for students to include fieldwork as part of their major. A three-member faculty committee helps the student plan the project, arranges for ongoing supervision, and evaluates the project at the end of the term. Fieldwork almost always involves writing a long paper or several short ones, as well as practical experience. All proposals for fieldwork must be presented in advance to the Committee on Academic Records for approval. A maximum of 15 credits in fieldwork may be earned. For further information students should contact an advising dean in 55 or 172 Goldwin Smith Hall.

## ADVISING

The following advisers and offices provide academic advising or information on college procedures and regulations.

### Faculty Advisers

All new students are assigned a faculty adviser. The adviser helps students plan programs of study and advises them about ways to achieve their academic goals. Advisers may also help students with study or personal problems or may direct them to other offices on campus where help is available. Academic difficulties may frequently be solved or avoided if students and advisers recognize problems early.

Advisers and new advisees meet first during orientation week to discuss course selection. New students are encouraged to see their advisers again early in the term, before it is too late to drop courses, to discuss their academic program and to become better acquainted. Advisers and advisees meet at least once each semester to discuss courses for the following term and whenever advisees wish to petition for an exception to college rules.

### Student Advisers

Each freshman is supplied with a list of student advisers who can provide information about the college's requirements, courses, and instructors and about life at Cornell.



## Major Advisers

After acceptance into a major, students are assigned a major adviser, a faculty member in the major department, with whom they make many of their most important academic decisions at Cornell. The adviser eventually certifies the completion of the major. The major adviser should be consulted by the student about all academic plans, including honors, study abroad, acceleration, and graduate study. The adviser's support is especially important if a student petitions for an exception to the requirements for the degree.

## Academic Services

The Academic Advising Center, 55 Goldwin Smith Hall, 255-5004 and the Office of Admissions, 172 Goldwin Smith Hall, 255-4833, offer resources for faculty and student advisers and for students themselves and their parents. Advising deans are available to help students define their academic and career goals and to help with special academic options and exceptions to college rules:

Lynne S. Abel—255-5004

Thak Chaloeintiarana—255-4833

Gerry Cox—255-4833

Ken Gabard—255-5004

Lawrence Lamphere—255-4833

Maria S. Terrell—255-5004

Janice Turner—255-5004

Peggy Walbridge—255-4833

Marilyn Williams—255-5004

## REGISTRATION AND COURSE SCHEDULING

### Enrollment in Courses in the College of Arts and Sciences

#### New Students

During orientation week, new students attend briefings and other informational meetings, meet with faculty advisers, and sign into courses.

#### Continuing Students

Continuing students select and schedule up to five courses during the semester prior to the one in which the courses will be taken. Students who do not "pre-register" during the designated period must wait until the beginning of the term and may well have difficulty securing places in the courses they most want. Before signing into courses, students plan their programs and discuss long-range goals with their faculty advisers. In addition, all students are welcome to discuss programs and plans with an advising dean in the Academic Advising Center, 55 Goldwin Smith Hall, or the Office of Admissions, 172 Goldwin Smith Hall.

At the beginning of each term, students find their schedules and confirm the accuracy of their records on "Just the Facts."

#### Limits on Numbers of Courses and Credits

To meet the 34-course requirement, students must normally take four courses during each

of six semesters and five courses during each of two semesters. To meet the 120-credit requirement, students must average 15 credits per semester. (AP credit and/or summer credits may reduce the numbers of courses and credits.)

#### Minimum number of credits per semester

To maintain good academic standing as a full-time student, students must enroll in at least twelve credits per semester; if for compelling personal or academic reasons students need to carry fewer than twelve credits, they should consult their faculty adviser and an advising dean. Permission is by petition only; it is freely given for first-semester students.

#### Maximum number of credits per semester

First-term freshmen must petition to register for more than eighteen credits; other students may register for more than eighteen credits only if their previous term's average was a 3.0 or higher. No more than twenty-two credits may be taken in a regular semester without permission of the Committee on Academic Records. Students who fail to receive approval for excess credits from the committee run the risk of having only 18 credits for the semester count toward the degree.

#### Attendance

Attendance in classes is a matter between students and their instructors. If a student cannot attend classes because of illness or family crisis, the Academic Advising Center will notify instructors at the request of the student or the family. Nonetheless, the student must arrange to make up examinations or other work with each instructor. A student who will be absent because of religious holidays or athletic competitions must discuss arrangements for making up work with his or her instructors well in advance of the absence. A student who must miss an examination must also consult with the professor in advance. Alternative arrangements are at the discretion of the instructor.

#### Adding and Dropping Courses

After course enrollment (pre-registration), students may not adjust their schedules until the new term begins. During the first three weeks of the semester, students may change courses without petitioning. Add/drop forms are available in the Academic Advising Center, 55 Goldwin Smith Hall.

After the third week of classes, students must petition to add courses. They may drop courses up to the seventh week of the term. Between the seventh and twelfth weeks students may petition to withdraw from courses, if (1) the instructor approves; (2) the adviser approves; (3) no issue of academic integrity is at stake and (4) an advising dean approves. Students must meet with an advising dean to obtain petition forms.

Courses dropped after the seventh week will be noted on the transcript by a "W" where the grade would normally appear. No petitions to withdraw from courses may be submitted after the end of the twelfth week in the term. Deadlines for short courses will be adjusted according to the length of the courses.

#### Leaves of Absence

Taking time off from college to think about goals and progress, or to gain experiences or funds, is sometimes useful. Students in good

academic standing who take a leave before the beginning of any semester or the end of the seventh week of the semester are welcome to register in the college the following semester. Five years is the maximum length of time a student may be on leave and return without special permission. Leaves of absence are of four types:

- 1) *Personal leaves* impose no conditions concerning reentering the college except for the five-year limit. Readmission is automatic upon written request made at least one month before the beginning of the term in which the student wishes to return.
- 2) *Medical leaves*, usually for at least six months, are granted by the college only upon recommendation by a physician from Gannett Health Center. In some cases, students must satisfy the Gannett Health Center that the condition requiring the leave has been corrected before they may return. The student's academic standing will also be subject to review at the time of the leave and on return.
- 3) *Conditional leaves* may be granted by an advising dean if the student is not in good academic standing or, in unusual circumstances, after the seventh week of the term. Normally students may not return from conditional leaves for at least two terms or until specific and individual conditions, such as completing unfinished work, have been met.
- 4) *Required leaves*: The Committee on Academic Records may require a leave of absence if a student is not making satisfactory progress toward the degree. See the section "Academic Actions."

Any student who wishes to take a leave of absence should consult an advising dean in the Academic Advising Center, 55 Goldwin Smith Hall or the Office of Admissions, 172 Goldwin Smith Hall. On readmission, the student's graduation date will be recalculated.

Students who take courses elsewhere while on leave may petition to have credits transferred and applied toward the 120 credits needed for graduation, but not toward the 100 credits required in the college. Approval depends on acceptable grades and the judgment of the relevant departments about the quality of the courses. Credits earned during a leave do not count toward the eight semesters of residence and may not be used to reduce the terms of residence. See the section "Residence."

#### Withdrawals

A withdrawal is a permanent severance from the university and from status as a degree candidate. Students planning to withdraw should consult an advising dean. Students not requesting a leave and failing to register for a term will be withdrawn from the college. The Committee on Academic Records may require a student to withdraw for a highly unsatisfactory academic record.

#### Transferring within Cornell (Internal Transfer)

Internal transfer from one college or school at Cornell into another is attractive for many students whose intellectual interests change. Students who want to transfer should discuss their eligibility with a counselor in the new school or college.



In some cases, students who want to transfer into the College of Arts and Sciences may transfer directly. In other cases, they may be referred to the Internal Transfer Division. During the term immediately preceding transfer into the College of Arts and Sciences, students should complete at least 12 credits of courses in the College of Arts and Sciences with a B average and without any grades of *Incomplete*, any S-U grades (unless only S-U grades are offered for that particular course), or any grades below C. Satisfying this minimum requirement does not, however, guarantee admission. Admission to the college is based on consideration of the student's entire record at Cornell and the high school record, not just the work of one semester. Interested students should see Dean Lamphere, 172 Goldwin Smith Hall.

## ACADEMIC STANDING

Students are in good academic standing for the term if they successfully complete at least 12 degree credits by the end of the term and receive no more than one D and no F or U grades. If a student completes only three courses, all grades must be above D. In addition, students are expected to make acceptable progress toward satisfying requirements for the degree, and to earn grades of C (not C-) or better in at least 100 of the total credits for the degree. Courses listed above under "Noncredit courses" do not count towards good academic standing.

### Academic Actions

Students who are not in good academic standing will be considered for academic action by the Committee on Academic Records or by one of the deans of the college.

### Warning

Any student who fails to maintain good standing will, at a minimum, be warned. The warning may be given by an advising dean or by the Committee on Academic Records. A warning is posted on a student's unofficial college transcript but is not reported to the university registrar and does not appear on official transcripts.

### Required leave of absence

A student in serious academic difficulty may be required by the Committee on Academic Records to take a leave of absence, normally for a full year. Usually, but not always or necessarily, the Committee on Academic Records warns students before suspending them. Before being allowed to return and reregister in the college, students must describe what they did on leave and how they resolved their problems and submit a plan for completing the degree. In some cases the students will be required to furnish evidence that they are ready to return before being allowed to reregister in the college. Students who request to return in less than a year must present to the committee exceptionally strong evidence of their readiness to return. "Required leave" and the date are posted on the student's transcript.

### Required withdrawal

The Committee on Academic Records may dismiss a student from the college because of a highly unsatisfactory record for one term or for failure to make satisfactory overall progress in grades, credits, or the require-

ments of the major. This action expels the student permanently from the college. "Required withdrawal" and the date are posted on the student's transcript.

Students being reviewed for academic action are urged to present evidence that will help explain their poor academic performance.

Students may appeal a decision or action of the committee if they have new relevant information. They must consult an advising dean about appealing.

### Forgery on Forms

Forging signatures or credentials on college forms is an academic offense; sometimes it constitutes academic fraud. In all cases of forgery on academic forms, the effect of the forged documents shall be negated. Students may then petition properly to do whatever they attempted to do improperly. Such incidents will be recorded in the Academic Integrity Hearing Board confidential file for forgeries. If a student forges more than once or if the forgery would advance the student's academic standing unfairly or fraudulently or if, for any other reason, the situation requires some response in addition to the uniform penalty, the Academic Integrity Hearing Board might make a different recommendation, such as a notation on the student's transcript, suspension, or dismissal.

## GRADES

### Letter Grades

See Grading Guidelines, page 12.

### S-U Grades

The S-U (satisfactory-unsatisfactory) option allows students to explore unfamiliar subjects or take advanced courses in subjects relatively new to them without being under pressure to compete with better prepared students for high grades. It is not meant to allow students to reduce the amount of work they complete in or the amount of effort they devote to a course. The S-U option is contingent upon the instructor's willingness to assign such grades. Students must select their grading option during the first three weeks of the term (virtually no exceptions to this deadline are permitted). A grade of S is equivalent to a grade of C- or higher; a grade of U, which is equivalent to any grade below C-, is a *failing* grade equal to an F. S means the student receives the credit specified for the course. U means no credit is given. A few courses in the college are graded exclusively S-U; in that case, the final grade appears on the transcript as SX or UX.

Courses that will count toward satisfaction of major requirements should not be taken for an S or U grade unless the department grants permission. Students may elect the S-U option in courses used to satisfy the distribution, language, and elective requirements, provided that such courses do not also count toward major requirements or serve as prerequisites for admission to the major. Students are advised to use the S-U option sparingly if they intend to apply to graduate school or for transfer to another college. There is no limit on the number of courses each term for which students may elect the S-U grade, but within the 120 credits required for the degree, a

minimum of 80 credits must be in courses for which a letter grade was received.

### Grades of Incomplete

A grade of incomplete signifies that a course was not completed before the end of the term for reasons beyond the student's control that are acceptable to the instructor. Students must have substantial (more than 50%) equity in the course; that is, they must be able to complete the remaining work without further registration and must have a passing grade for the completed portion. When a grade of incomplete is reported, the instructor submits a form stating what work must be completed, when it must be completed, and the grade earned if the work is not completed by that date. When a final grade is reported, it is recorded on the official transcript with an asterisk and a footnote explaining that this grade was formerly an incomplete.

Students must resolve any incompletes with their instructors before graduation.

### R Grades

R designates two-semester or year-long courses. The R is recorded on the student's transcript at the end of the first term. The grade recorded at the end of the second term evaluates the student's level of performance in the course for the entire year. The total of credits earned for the whole course is listed each term.

### Grade Reports

Students should periodically check their courses and grades on "Just the Facts" to be sure that they are recorded correctly.

### Class Rank

The college does not compute class rank.

## GRADUATION

### Application to Graduate

In the first semester of their senior year, students complete an application to graduate so that the college can check each student's plan for fulfilling college requirements. This process is intended to help seniors identify problems early enough in the final year to make any necessary changes in course selection to satisfy those requirements. *Meeting graduation requirements is the student's responsibility*; problems that are discovered, even late in the final term, must be resolved by the student before the degree can be granted.

### Degree Dates

There are three degree dates in the year: May, August, and January. Students who plan to graduate in August may attend graduation ceremonies in the preceding May. Students graduating in January are invited to a special recognition ceremony in December; they may also attend graduation ceremonies in the following May.

### The Degree

The College of Arts and Sciences grants only one degree (no matter what the student's major): the A.B. (or B.A.). A.B. is the abbreviation of the Latin name for the degree, "Artium Baccalarius," or translated into English, B.A., "Bachelor of Arts."

## Honors

### Dean's List

Inclusion on the Dean's List for academic excellence is an honor bestowed by the dean of the college semester by semester. The criteria are to identify and include about the top 30 percent of students, are subject to slight change from semester to semester, and are available in the Academic Advising Center, 55 Goldwin Smith Hall.

### Bachelor of Arts with Honors

Almost all departments offer honors programs for students who have demonstrated exceptional ability in the major and who have completed original independent research. The honors programs are described by individual departments in the following sections. The degree of Bachelor of Arts with honors will be conferred upon students who, in addition to having completed the requirements for the degree of Bachelor of Arts, have satisfactorily completed the honors program in their major and have been recommended for honors by their major department, the Independent Major Program, or the College Scholar Program. Concentrations do not offer honors programs.

### Bachelor of Arts with Distinction

The degree of Bachelor of Arts with distinction in all subjects will be conferred on students who have completed the requirements for the degree of Bachelor of Arts, if they have met the following requirements by the end of their final semester:

- 1) completed at least 60 credits while registered in regular sessions at Cornell;
- 2) ranked in the upper 30 percent of their class at the end of the seventh semester, or next-to-last semester for transfers and accelerants;
- 3) received a grade below C- in no more than one course;
- 4) received no failing grade;
- 5) maintained good academic standing, including completing a full schedule of at least 12 credits, in each of their last four terms; and
- 6) have no *Incompletes* remaining on their records.

## CALENDAR SUPPLEMENT

All of the dates in the university calendar at the front of this volume apply to all Cornell students. Listed below are some additional dates that are of importance for students in the College of Arts and Sciences.

|   | Fall     | Spring  |
|---|----------|---------|
|   | 1998     | 1999    |
| Last day for adding courses without petition.                                     | Sept. 18 | Feb. 12 |
| Last day for changing grade option to S-U or letter.                              | Sept. 18 | Feb. 12 |
| First deadline for submitting independent major requests. Go to Academic Advising | Sept. 28 | Feb. 22 |

Center, 55 Goldwin Smith Hall, for further information.

Last day for dropping courses without petition. Oct. 16 March 12

Last day to petition to withdraw from a course. Nov. 20 April 23

Second deadline for submitting independent major requests. Go to Academic Advising Center, 55 Goldwin Smith Hall, for further information. Nov. 30 April 5

Deadline for requesting internal transfer to the College of Arts and Sciences for the following term. Dec. 4 May 7

Deadline for applying to the College Scholar Program. April 28

Deadline for applying to study abroad. See Cornell Abroad, 474 Uris Hall

Course enrollment (pre-registration) for the following term. TBA TBA

## ADMINISTRATION

Philip Lewis, dean—255-4146

Biddy Martin, associate dean—255-4147

Lynne S. Abel, associate dean of undergraduate education—255-3386

Thak Chaloemtiarana, associate dean—255-7061

Jane V. Pedersen, associate dean of administration—255-7507

## Courses and Departments

### SPECIAL PROGRAMS AND AREAS OF CONCENTRATION

The college offers a number of interdisciplinary programs described in the section following the departmental program descriptions.

### AFRICANA STUDIES MAJOR

See under Special Programs and Interdisciplinary Studies.

### AKKADIAN

See under Department of Near Eastern Studies.

## AMERICAN STUDIES

See under Special Programs and Interdisciplinary Studies.

## ANTHROPOLOGY

P. S. Sangren, chair; M. Small, director of undergraduate studies; R. Ascher, T. Bestor, J. Borneman, J. Fajans, D. Greenwood, J. Henderson, D. Holmberg, B. J. Isbell, A. T. Kirsch, J. Krier, B. Lambert, K. March, V. Munasinghe, V. Santiago-Irizarry, J. Siegel, T. Turner, T. Volman. Emeritus: R. Smith

Anthropology is one of the most diverse disciplines in the university. Spanning human evolution, the development and heterogeneity of language and culture, human history, and the diversity of cultures past and present, the field has broad scope, utilizes a variety of methods, addresses basic issues about human origins and human life, and maintains commitment to understanding social life and using this understanding to improve society. Anthropology is an ideal "liberal arts" major. It also serves as a major that, when well designed by the student with their adviser, prepares students for a wide range of professional careers, e.g., law, medicine, foreign service, social services, and business, among others.

Courses for non-majors: Anthropology welcomes non-majors into many of its courses. Unless prerequisites are explicitly stated, 200- and 300-level courses do not have formal prerequisites and can be taken by students without prior experience in anthropology. Such students are welcome in these upper-level courses. For additional information to assist non-majors and students from other colleges in selecting anthropology courses, see the Anthropology Department web page (<http://falcon.arts.cornell.edu/~anthro/>).

### The Major

The range and complexity of the field of anthropology requires active collaboration between the student and a faculty adviser in developing an individualized program of study. To enter the anthropology major, a student must pass one course in each of the two broad introductory areas of anthropology: "Nature and Culture" and "Culture and History" listed below under the heading "Introductory Courses." Provisional acceptance into the major is possible before completing these courses, with permission from the Director of Undergraduate Studies in anthropology. When students first enter the major, they work with their adviser to develop a preliminary program of study built around their own interests and goals.

In the first semester of the junior year, the student and adviser formalize a concentration reflecting the special interests of the student and select a set of courses from those listed below as a program of study. Once the concentration is developed, they submit the plan to the Anthropology Curriculum Committee for comment and advice. Examples of possible concentrations are Latin American ethnohistory and contemporary identity politics, nature and culture in human history, prehistory of the Americas, anthropology and literature, anthropology and social change, ethnomusicology, anthropology and the arts,

etc. The plan must include a minimum of eight courses in anthropology (including an Anthropology Senior Seminar) totaling 32 credit hours. When warranted, the adviser is free to approve up to two cognate courses from other departments totaling up to eight credit hours to fill this eight-course requirement. Students may revise their program of study in consultation with their adviser as they move through their studies. Our goal is to provide a close and supportive advising relationship and a strong and coherent structure for the student's major.

In their senior year, anthropology majors are required to take a Senior Seminar. These seminars meet weekly, are discussion-based, and are limited to anthropology majors. A professor serves as the coordinator for the group. Collaboratively the students and the professor plan the semester to reflect the concentrations and/or research interests of the participating students. Thus, the Senior Seminar serves as a space where students develop their own synthesis of their undergraduate work in anthropology.

**Study abroad and off-campus study programs:** The Department of Anthropology encourages students to consider a semester of study abroad or off-campus study developed as an integral part of the student's major concentration and has designated Professor Viranjini Munasinghe as the Anthropology Study Abroad adviser.

**The Cornell-Nepal Study Program:** the Cornell-Nepal Study Program is a joint program of Cornell University and Tribhuvan University, the national university of Nepal. Qualified juniors, seniors, and first- or second-year graduate students work with faculty from both universities to prepare for and undertake field research projects in Nepal. Students receive 15 credits per semester; students may enroll for either fall or spring semester, or for the entire year; application is through Cornell Abroad. For further information, consult David Holmberg or Kathryn March in the Department of Anthropology.

Other anthropologically-relevant study abroad options, using existing Cornell Abroad and off-campus options, can be worked out in consultation with the major adviser, the Anthropology Study Abroad adviser, and Cornell Abroad.

## Honors

Honors in anthropology are awarded for excellence in the major, which includes overall grade point average and completion of an honors thesis. Anthropology majors interested in the Honors Program should consult the chair of the Honors Committee in their junior year. To qualify for entrance into the Honors Program, a student must have at least a 3.0 GPA overall and 3.3 GPA in the major, and the consent of a faculty member in anthropology who will guide the honors thesis. After applying to the program and being admitted as a candidate by the Honors Committee, the student will conduct research and write a thesis. This thesis will be evaluated by the faculty research adviser and two other faculty members. Honors (i.e., cum laude, magna cum laude, or summa cum laude) are awarded based on the quality of the thesis and the student's overall record. Honors candidates must start this process by consulting their major adviser about the honors program early in their junior year.

While working on the thesis during the senior year, students should make use of the Senior Seminar as a place to develop the ideas for their thesis. In addition, students may enroll in Anthropology 483 (fall or spring) "Honors Thesis Research." To complete the thesis, students must enroll in 491 (fall or spring) "Honors Thesis Write-up." Only Anthropology 483 may count toward hours for completion of the anthropology major requirements. The credit hours for these courses are variable, grades for these courses are given by the faculty research adviser, and they are based on performance during thesis research and writing.

Any honors candidate whose research directly involves working with human subjects must receive approval for the project from the Cornell University Committee on Human Subjects.

## Special Programs and Facilities

**Collections:** The department has an extensive collection of archaeological and ethnological materials housed in the anthropology collections. A limited number of students can make arrangements to serve as interns in the anthropology collections. Olin Library houses some of the most extensive collections of materials on the ethnology of Southeast Asia, South Asia, East Asia, and Latin America to be found anywhere in the United States. The biological anthropology laboratory (McGraw B65) houses an extensive collection of materials for teaching purposes, including 1) human skeletal remains, 2) articulated skeletons and cranial casts of primates, and 3) casts of important fossils in the human lineage.

**Independent Study:** Specialized individual study programs are offered in Anthropology 497, Topics in Anthropology, a course open to a limited number of juniors and seniors who have obtained consent and supervision of a faculty member. Undergraduates should note that many 600-level courses are open to them by consent of the instructor.

**Colloquia:** The Department of Anthropology holds colloquia almost every week of the semester on Friday at 3:30 in McGraw 215. Faculty members from Cornell and other universities participate in discussions of current research and problems in anthropology. Students are encouraged to attend.

For more complete information about the anthropology major, see the Director of Undergraduate Studies, pick up a copy of the major brochure (which includes descriptions of the courses not offered during 1998-99), or visit the Anthropology Department web page (<http://falcon.arts.cornell.edu/~anthro/>).

## I. Introductory Courses

### A. Nature and Culture:

#### **ANTHR 101 Introduction to Anthropology: Biological Perspectives on the Evolution of Humankind**

Fall. 3 credits. M. Small.  
The evolution of humankind is explored through the fossil record, studies of the biological differences among current human populations, and a comparison with our closest relatives, the primates. This course investigates the roots of human biology and

behavior with an evolutionary framework. Fee for lab usage and maintenance, \$5.

#### **ANTHR 103 The Scope of Anthropology** Spring. 1 credit. Prerequisite: concurrent enrollment in or prior completion of Anthropology 101 or Anthropology 102. S-U grades only. Staff.

This course is intended for majors or prospective majors in anthropology. Each week a different member of the faculty in anthropology at Cornell will make a presentation on the nature of their work within the field and discuss their interests with students. The course is meant to introduce the range of approaches found within anthropology and help students in planning future course work.

#### **ANTHR 203 Early People: The Archaeological and Fossil Record (also Archaeology 203) #** Spring. 3 credits. T. Volman.

A survey of the archaeological and fossil record of human evolution. Contributions by researchers from a variety of disciplines are highlighted, as are the discoveries that have enlivened the study of human evolution for more than a century. Critical evaluation of evidence and interpretation will be stressed. Demonstrations and films supplement the lectures.

#### **[ANTHR 211 Nature and Culture @** Spring. 4 credits. Not offered 1998-99.]

#### **ANTHR 275 Human Biology and Evolution (also Biological Sciences 275 and Nutritional Sciences 275)**

Fall. 3 credits. S-U grades optional, with permission of instructor. Offered alternate years. Lec's, W F 10:10; disc. M 10:10. K. Kennedy.

An introduction to the biology of Homo Sapiens through an examination of human evolution, biological diversity, and modes of adaptation to past and present environments. Evolutionary theory is reviewed in relation to the current evidence from the fossil record and studies of the evolution of human behavior. A survey of human adaptation covers a complex of biological and behavioral responses to environmental forces and short-term adaptive responses. Topics such as creationism, the Piltdown fraud, and sociobiology debate, genetic engineering, race and I.Q., and racism are presented as examples of current issues in human biology. These topics and others are the focus of the optional one-hour weekly discussions.

### B. Culture and History:

#### **ANTHR 100 Introduction to Archaeology (also Archaeology 100) #**

Fall. 3 credits. J. Henderson.  
A broad introduction to archaeology—the study of material remains to answer questions about the human past. Case studies highlight the variability of ancient societies and illustrate the varied methods and interpretive frameworks archaeologists use to reconstruct them. This course can serve as a platform for both Archaeology and Anthropology undergraduate majors.

#### **ANTHR 102 Introduction to Anthropology: The Comparison of Cultures @**

Spring. 3 credits. T. Bestor.  
An introduction to cultural anthropology through ethnographies, or the descriptive accounts of anthropologists. Through readings and lectures, students acquaint

themselves with a number of cultures from several parts of the world. The cultures range in form from those of small-scale tribal societies to those of state societies. Throughout the course, we attempt to make sense of exotic cultures in their own terms. Attention is focused on variation in cultural patterns as they are expressed in social, economic, and ritual practices. In this encounter, the principles of anthropology as a comparative enterprise that poses distinct cultural systems in relief will be developed. Fiction, films, and exercises supplement the formal anthropological materials.

**ANTHR 103 The Scope of Anthropology**  
Spring. 1 credit. Prerequisite: concurrent enrollment in or prior completion of Anthropology 101 or Anthropology 102. S-U grades only. Staff.  
For course description, see section I.A.

**ANTHR 200 Cultural Diversity and Contemporary Issues** @  
Fall. 3 credits. J. Borneman.  
This course will introduce students to the meaning and significance of forms of cultural diversity for understanding contemporary issues. Drawing from films, videos, and selected readings, students will be confronted with different representational forms that portray cultures in various parts of the world and they will be asked to examine critically their own prejudices as they influence the perception and evaluation of cultural differences. We shall approach cultures holistically, assuming the inseparability of economies, kinship, religion, and politics, as well as interconnections and dependencies between world areas (e.g., Africa, Latin America, the West). Among the issues considered: "political correctness" and truth; nativism and ecological diversity; race, ethnicity, and sexuality; sin, religion, and war; global process and cultural integrity.

**[ANTHR 202 Interpretive Archaeology (also Archaeology 202)]** #  
Fall. 3 credits. Not offered 1998-99.]

**[ANTHR 204 Ancient Civilizations (also Archaeology 204)]** @ #  
Fall. 3 credits. Not offered 1998-99.]

**ANTHR 215 Stone Age Art (also Archaeology 215)** @ #  
Fall. 3 credits. T. Volman.  
When did "art," however defined, appear during the human career, how was it produced and for what purposes? These are some of the questions we will investigate through a survey of the discovery, validation, analysis, and interpretation of the earliest art. The course will cover a variety of finds from the Old World, including the well-known cave art of southwestern France and northern Spain, and also consider portable art and decoration. The contributions of new analytical techniques and interpretive approaches are highlighted.

## II. Honors and Independent Study

**ANTHR 483 Honors Thesis Research**  
Fall or spring. Credit and hours to be arranged. Prerequisite: consent of the Honors Committee. Staff.  
Independent work under the close guidance of a faculty member selected by the student.

**ANTHR 491 Honors Thesis Write-up**  
Fall or spring. Credit and hours to be arranged. Staff.

**ANTHR 497 Topics in Anthropology**  
Fall or spring. Credit and hours to be arranged. Intended for undergraduate students only. Staff.  
Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

## III. Anthropology Major Senior Seminars

In the senior year, anthropology majors are required to take a Senior Seminar. These seminars meet weekly, are discussion-based, and are limited to anthropology majors. A professor serves as the coordinator for the group. Collaboratively the students and the professor plan the semester to reflect the concentrations and/or research interests of the participating students. Thus the Senior Seminar serves as a space where students develop their own synthesis of their undergraduate work in anthropology.

**ANTHR 489 Anthropology Senior Seminar**  
Fall or spring. 4 credits. Limited to 15 students. Prerequisite: Anthropology majors only. Fall, D. Holmberg; spring, V. Munasinghe.

This course is a synthesis of each student's undergraduate concentration in the major. In collaboration, the instructor and the students will develop a series of topics representing the interests of the students. Students will be required to read extensively and present topics.

## IV. Nature and Culture

Thinking about nature and culture and their interaction is central to contemporary anthropology. The courses in this section present a biological and evolutionary perspective on behavior, focus on the interplay between nature and culture, and discuss the controversies surrounding these relationships between these dimensions of human life.

**[ANTHR 208 The Evolution of Human Mating]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 344 Male and Female in Chinese Culture and Society (also Women's Studies 344)]** @  
Fall. 4 credits. Not offered 1998-99.]

**ANTHR 370 Environmental Archaeology (also Anthropology 670 and Archaeology 370/670)**  
Fall. 4 credits. Prerequisite: two previous courses in Archaeology or permission of instructor. T. Volman.

A survey of selected topics in paleoenvironmental analysis and reconstruction, with emphasis on how they inform interpretations of the archaeological record. The course ranges broadly from a general consideration of human ecology and the role of environment in culture change to detailed study of specific techniques and approaches.

**[ANTHR 371 Human Paleontology (also Biological Sciences 371)]** @ #  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 390 Primate Behavior and Ecology]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 409 Approaches to Archaeology (also Anthropology 609 and Archaeology 409/609)]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 475 Evolutionary Theory and Human Behavior (also Anthropology 675)]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 490 Primates and Evolution]**  
Spring. Not offered 1998-99.]

## V. Human History and Archeology

Archaeology tells the story of human origins, the invention of farming and settled life, the rise of complex social institutions and technologies, and the worldviews of the past, while also teaching field and laboratory methods for uncovering the human past.

**ANTHR 203 Early People: The Archaeological and Fossil Record (also Archaeology 203)** #  
Spring. 3 credits. T. Volman.  
For course description, see section I.A.

**ANTHR 215 Stone Age Art (also Archaeology 215)** @ #  
Fall. 3 credits. T. Volman.  
For course description, see section I.B.

**[ANTHR 317 Stone Age Archaeology (also Archaeology 317)]**  
Fall. 4 credits. Not offered 1998-99.]

**ANTHR 355 Ancient Mexico and Central America (also Archaeology 355)** @ #  
Spring. 4 credits. J. Henderson.  
A survey of the history and prehistory of ancient Mexico and Central America from earliest times through the Spanish invasion, with emphasis on the Aztec and Maya civilizations. Specific topics include: the transition from hunting and gathering to settled farming; the rise of complex urban societies; and the development of trade and other mechanisms that linked societies throughout the region. How to make use of historical and ethnographic information on post-contact societies of the region to enrich archaeological interpretation of ancient peoples is a general theme.

**ANTHR 370 Environmental Archaeology (also Anthropology 670 and Archaeology 370/670)**  
Fall. 4 credits. Prerequisite: two previous courses in Archaeology or permission of instructor. T. Volman.  
For course description, see section IV.

**[ANTHR 371 Human Paleontology (also Biological Sciences 371)]** #  
Fall. 4 credits. Not offered 1998-99.]

**ANTHR 405 Archaeological Research Design (also Anthropology 605 and Archaeology 405/605)**  
Spring. 4 credits. Prerequisite: permission of instructor. J. Henderson, T. Volman.  
Archaeological practice demands careful definition of research objectives and appropriate strategies before excavation or other fieldwork begins. Critical information lies in



the arrangement and association of objects and structures; this context should be a basic concern of any field investigation, particularly when it is destroyed by excavation. This course relies on case studies to illustrate how surveys, excavations, and analytical techniques must be tailored to solving specific problems. A seminar especially recommended for undergraduate majors and graduate archaeologists but open to anyone with a serious interest in archaeology.

**[ANTHR 409 Approaches to Archaeology (also Anthropology 609 and Archaeology 409/609)]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 456 Mesoamerican Religion, Science, and History @ #]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 458 Archaeological Analysis (also Anthropology 658 and Archaeology 458/658) @]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 493 Seminar in Archaeology (also Archaeology 493) @ #]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 494 Seminar in Archaeology: The Archaeology of Human Origins (also Archaeology 494) @ #]**

Spring. 4 credits. Not offered 1998-99.]

## VI. Anthropological Thought and Method

As a form of inquiry, anthropology has a long and complex history and utilizes a wide variety of theories and methods. In this section, topics in the history of anthropological thought and a wide variety of anthropological approaches are presented, along with courses focused on the design of anthropological research projects.

**ANTHR 215 Stone Age Art (also Archaeology 215) @ #**

Fall. 3 credits. T. Volman.

For course description, see section I.B.

**ANTHR 291 Filming Other Cultures (also Anthropology 691 and Theatre Arts 291/691) @**

Spring. 3 credits. Limited to 20 students. Preference given to students who have taken either Anthropology 102 or Theatre Arts 474. Fee for film screening and maintenance, \$35. R. Ascher.

Shortly after the first films were screened, their makers saw in motion pictures a promise for greater understanding among peoples. Was the promise fulfilled? In this discussion course, responses to this question are examined through the study of short, representative films and related readings. The discussions are framed and informed by ideas from anthropology and film studies. For example, we consider: aesthetics, ethics, and responsibility in filming and editing; connections between sound—or lack of it—and image; the implications of film as a product of Euroamerican culture; cultural assumptions in camera movements, film color, and film pace; indigenous people's presentations of themselves and Euroamerican representations of others; and the moving line that separates fiction from non-fiction films. For one meeting each week, two students, in cooperation with the instructor, are responsible for leading the discussion.

**[ANTHR 306 Ethnographic Description]**  
Fall. 4 credits. Not offered 1998-99.]

**ANTHR 324 Anthropology Amongst the Disciplines**

Fall. 4 credits. J. Siegel.

Anthropology is distinguished amongst the disciplines in depending on a notion of the not-yet conceptualized, the encounter with which is thought to provide an inassimilable element into thinking about culture and society. The course provides a history and assessment of this idea and illustrations of its embodiment, particularly in studies of ritual.

**ANTHR 362 Democratizing Society: Participation, Action, and Research (also Anthropology 662)**

Fall. 4 credits. D. J. Greenwood.

This course poses an alternative to distanced, "objectivist" social science by reviewing some of the numerous approaches to socially engaged research. Among the approaches discussed are those centering on the pedagogy of liberation, feminism, the industrial democracy movement, "Southern" participatory action research, action science, and participatory evaluation. There are no prerequisites and undergraduates are welcome.

**ANTHR 368 Marx: An Overview of His Thought (also Anthropology 668)**

Spring. 4 credits. T. Turner.

A reading and interpretation of Marx's principal writings, emphasizing both the continuities and the changes from his earlier to his later works, with attention given to contemporary developments and controversies in Marxian scholarship.

**ANTHR 400 The Craft of Anthropology: Ethnographic Field Methods**

Fall. 4 credits. V. Santiago-Irizarry.

This course will provide students with practical understanding about what anthropologists actually do in the field. We will examine problems that emerge in conducting fieldwork which raise ethical, methodological, theoretical, and practical issues in the observation, participation in, recording, and representation of culture(s). Students will be expected to develop a semester-long, local research project that will allow them to experience fieldwork situations.

**ANTHR 405 Archaeology Research Design (also Anthropology 605 and Archaeology 405/605)**

Spring. 4 credits. Prerequisite: permission of instructor. J. Henderson, T. Volman.

For course description, see section V.

**ANTHR 412 Contemporary Anthropological Theory @**

Spring. 4 credits. B. Lambert.

A survey of the assumptions anthropologists make concerning the nature of society and culture and the explanations they have proposed for social behavior, values, belief systems, and ritual. Problems of social continuity and change will be addressed by way of theories of process, conflict, and transaction. Problems of cross-cultural understanding will be explored through interpretive and structural studies of symbolism, ritual, mythology, concepts of the person, and cultural logic. Examples will be drawn from Western and non-Western societies, past and present.

**ANTHR 420 Development of Anthropological Thought**

Fall. 4 credits. Limited to 15.

A. T. Kirsch.

An examination of the history and development of anthropological theory and practice. The course will focus on the differences and continuities among the various national and historical approaches that have come to be regarded as the schools of anthropology.

**ANTHR 453 Visual Anthropology**

Spring. 4 credits. Enrollment is limited by appropriate space for showing work. S-U grades only. Fee for film screening and maintenance, \$20. R. Ascher.

The expression of ideas about the human condition through original drawings, graphics, paintings, photographs, cinema, sculpture, and video that take person as subject. Writing can be combined with visual expression, as, for example, in concrete poetry or photographic essays. Projects must conform to two general guidelines: (1) the student must have prior knowledge of the medium chosen or concurrent course work in it, and (2) the project must be one that can be developed throughout the course and benefit from its particular setting. In the first half, the creative work of others is studied. For example, we read Spiegelman's MAUS and view films made by both anthropologists and the people whom they visit. The second half is devoted to hour-long progress reports and discussions of the work of people in the course.

**[ANTHR 458 Archaeological Analysis (also Anthropology 658 and Archaeology 458/658) @]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 474 Laboratory and Field Methods in Human Biology (also Biological Sciences 474)**

Spring. 5 credits. Prerequisite: one year of introductory biology or Anthropology 101 or permission of instructor by preregistration in E231 Corson. Limited to 16 students. Offered alternate years. K. Kennedy.

Practical exercises and demonstrations of modern approaches to the methodology of physical anthropology. Emphasis on comparative human anatomy, osteology, description of skeletal and living subjects, paleopathology, skeletal maturation, and relevant field techniques for the archaeologist and forensic anthropologist. This course includes the dissection of a profused non-human primate.

**ANTHR 487 Field Research Abroad @**

Fall or spring. Credit to be arranged.

Intended for undergraduate students only. Staff.

Field research abroad as part of the Cornell-Nepal Studies Program, the Cornell-Honduras Program, or other departmentally-approved programs. Topics are selected and project proposals prepared by students in consultation with faculty. Fieldwork typically involves extended research (usually 4-6 weeks) in a foreign setting with faculty supervision, culminating in a major paper or report.

**[ANTHR 494 Seminar in Archaeology: The Archaeology of Human Origins (also Archaeology 494) @ #]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 495 Classic Theorists Seminar**

Spring. 4 credits. Limited to 15 students.

A. T. Kirsch.



This seminar will concentrate on the writings of Freud, Durkheim, and Weber, major figures in the shaping of contemporary social science. In particular, our concern will be how the works of these three classic theorists contributed to the development of holistic anthropological perspectives as well as to a variety of specialized developments such as "culture and personality" studies, "structural-functional" analysis, and "cultural-symbolic" studies.

## VII. Understanding Cultures

Anthropologists examine the diversity of human behaviors, social relationships and structures, economies, political and legal orders, worldviews, logics, languages, symbols, myths, and religions among the many other means human beings invent to create and reproduce social life around the world. Anthropologists work from a holistic perspective to account for differences and similarities across cultures. Anthropologists also take small-scale societies and local sociocultural systems as the object of analysis. They collect data primarily through ethnographic fieldwork, that is, months or years of participating in and observing of the societies they study. Anthropologists see inherent linkages between the practical and the meaningful dimensions of human existence.

### A. Anthropological Approaches to Economy, Society, Law, and Politics:

The courses below take as their starting point what are usually defined as the social, political, legal, and economic practices and structures of human life and show how they are shaped culturally and how they shape culture.

**[ANTHR 217 Ethnicity, Identity, and the State]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 305 Emotion, Gender, and Culture (also Women's Studies 305)]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 313 Anthropology of the City]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 321 Sex and Gender in Cross-Cultural Perspective (also Anthropology 621 and Women's Studies 321/631)]** @  
Fall. 4 credits. K. March.

An introduction to the study of sex roles cross-culturally and to anthropological theories of sex and gender. The course examines various aspects of the place of the sexes in social, political, economic, ideological, and biological systems to emphasize the diversity in gender and sex-role definition around the world.

**[ANTHR 323 Kinship and Social Organization]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 326 Economic Anthropology]** @  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 328 Conflict, Dispute Resolution, and Law in Cultural Context]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 380 State, Nation, and Everyday Life]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 426 Ideology and Social Reproduction]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 460 Culture and International Order]**

Fall. 4 credits. J. Borneman.  
This course focuses on the interplay of culture, understood in the broadest anthropological sense, with international order. We will examine how different models of linguistic categorization are replicated by and interact with one another at the level of culture and the international (or world) system. By bringing together research from different domains that tends to be seen as discrete, this seminar hopes to explore how an anthropological perspective can inform the study of international order, and conversely, how an awareness of transnational and transcultural processes can open up more fruitful areas of anthropological research.

**[ANTHR 470 Anthropology, Theory, Politics, Performance (also Government 470)]**  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 479 Ethnicity and Identity Politics: An Anthropological Perspective]**  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 481 Sex, Money, and Power: Topics in Kinship Theory]**  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 485 Mothers, Priests, Rebels, and Indian Chiefs: New Social Movements in Latin America (also Anthropology 685)]** @  
Spring. 4 credits. B. J. Isbell.

Latin America is characterized today as a region of widespread yet diverse forms of mobilization that appear to be in constant transformation. The "Mad Mothers" of Argentina, indigenous environmentalists, liberation theologians, revolutionaries, ethnic leaders, gay activists, and urban squatters are challenging historicity, engaging in cultural innovation, and articulating in diverse ways with the state and national cultures. This seminar will chart a course between theoretical texts on power and mobilization and examples of ethnography/historical cases of social movements.

### B. Interpretive Approaches in Cultural Anthropology:

These courses stress symbolic or textual approaches to human society. They take as their object of analysis structures of meaning in such diverse areas as performance and text, myth and religion, views of the self, gender, and the sociology of knowledge. These same topics arise in many of the area-focused courses as well (Section D), but take center stage in the following courses.

**[ANTHR 291 Filming Other Cultures (also Anthropology 691 and Theatre Arts 291/691)]** @

Spring. 3 credits. Limited to twenty students. Preference given to students who have taken either Anthropology 102 or Theatre Arts 474. Fee for film screening and maintenance, \$35. R. Ascher.  
For description, see section VI.

**[ANTHR 320 Myth, Ritual, and Symbol (also Religious Studies 320)]** @  
Spring. 4 credits. J. Fajans.

This course examines how systems of thought, symbolic forms, and ritual practice are

formulated and expressed in primarily non-Western societies. It focuses on anthropological interpretations of space, time, cosmology, myth, classificatory systems (such as color, totems, food, dress, kinship), taboo, sacrifice, witchcraft, sorcery, and rites of passage (birth, initiation, marriage, death). It will examine both the roles of specialists (spirit mediums, curer, priests, ascetics, etc.) and nonspecialists in producing these cultural forms.

**[ANTHR 322 Magic, Myth, Science, and Religion (also Religious Studies 322)]** @

Fall. 3 credits (4 by arrangement with instructor). Limited enrollment.  
A. T. Kirsch.

Surveys various classic anthropological perspectives on the role of religion as a cultural system in human life. Magic, myth, and ritual as cultural markers of and solutions to endemic contradictions, tensions, and transitions are explored. We will ponder the role of science as cultural system and the present state and future prospects for religion in the "modern" and "post-modern" world.

**[ANTHR 379 Culture, Language, and Thought]**  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 406 The Culture of Lives (also Women's Studies 406)]** @  
Spring. 4 credits. K. March.

This seminar will look at persons, lives, cultures and methods in anthropological life history materials. Throughout the seminar we will attend to the evolution of interest in, forms of, and uses for life history materials in anthropology, with special attention to differences in men's and women's lives and life (re)presentations.

**[ANTHR 408 Gender Symbolism (also Women's Studies 408)]** @  
Spring. 4 credits. K. March.

This seminar explores the propositions that gender is (1) not a collage of cultural universals, but nevertheless is elemented to the construction of culture, and (2) is not simply or transparently about the sexes, but still is integral to the construction of self and society. We will look at various cultures of gender, the processes and concomitants of their formation, and the place of the people who live and believe in them. In particular we will try to look beyond Western constructions of mutually exclusive, hierarchically related, and universally applied gender.

**[ANTHR 417 Person, Gender, and Song (also Women's Studies 416)]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 432 Culture and Performance, and Performing Culture]** @  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 453 Visual Anthropology]**  
Spring. 4 credits. Enrollment is limited by appropriate space for showing work. S-U grades only. Fee for film screening and maintenance, \$20. R. Ascher.  
For course description, see section VI.

**[ANTHR 456 Mesoamerican Religion, Science and History]** @ #  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 460 Culture and International Order]**  
Fall. 4 credits. J. Borneman.  
For course description, see section VII.A.

### C. Cultures in Anthropological Perspective:

Anthropology constructs its theories in the comparison of different social and cultural systems and thus depends integrally on knowledge about particular places. The courses below are all focused on the cultures and societies of particular areas of the world and organize knowledge about these areas in reference to key anthropological questions. Students without prior experience in anthropology are welcome in these courses.

#### **ANTHR 221 Anthropological Representation: Ethnographies on Latino Culture (also Latino Studies Program 221)**

Fall. 3 credits. V. Santiago-Irrizarry. Representation is basic to anthropology. In translating cultures, anthropologists produce authoritative representations of and about other people's lives. In this course, we will examine, with a critical eye, the production of representations about U.S. Latino cultures as these are embodied in anthropological texts. Issues to be explored include the relation between the ethnographer and the people s/he is studying, the contexts in which ethnographic texts are produced, and the way they may position different cultural groups within the larger national context.

#### **ANTHR 230 Cultures of Native North America @ #**

Fall. 4 credits. B. Lambert. A survey of the principal Eskimo and American Indian culture areas north of Mexico. Selected cultures will be examined to bring out distinctive features of the economy, social organization, religion, and worldview. Although the course concentrates on traditional cultures, some lectures and readings deal with changes in native ways of life that have occurred during the period of European-Indian contact.

#### **[ANTHR 303 Asians in the Americas: A Comparative Perspective (also Asian American Studies 303)]**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 316 Power, Society, and Culture in Island Southeast Asia @**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 333 Ethnology of the Andean Region @ #**

Fall. 4 credits. Not offered 1998-99.]

#### **ANTHR 335 Subsistence, Polity, and Worldview in Mainland Southeast Asia @**

Spring. 4 credits. Limited to 12 students. Prior course work in Anthropology or Asian Studies encouraged but not required. A. T. Kirsch.

A survey of the peoples and cultures of Mainland Southeast Asia from prehistoric to contemporary times. The course examines the social-cultural implications of the subsistence forms found in the region: foraging, swidden horticulture, irrigated rice cultivation, capitalist developments, and current trends toward a globalized economic order. We examine how these subsistence forms relate to sustainable population size, societal complexity, and forms of governance ranging through "band" societies, "galactic polities" and contemporary "nation-states." The grounding of these forms of subsistence, governance, and social organizations in indigenous and supra-national religious values

and worldviews is of special concern in the course.

#### **[ANTHR 336 Change and Continuity in the Pacific Islands @**

Fall. 4 credits. Not offered 1998-99.]

#### **ANTHR 337 Gender, Identity, and Exchange in Melanesia**

Fall. 4 credits. J. Fajans.

Anthropologists working in Melanesia (a group of islands in the Western Pacific) have contributed significantly to the development of anthropological theory in gender studies, concepts of person and identity, and ritual and economic aspects of exchange. This course will introduce students to the concepts of anthropology through the intensive study of a particular culture area. Readings will include classic works, explorers' accounts, literature from the region, and contemporary anthropological studies.

#### **ANTHR 339 Peoples and Cultures of the Himalayas @**

Fall. 4 credits. K. March.

A comprehensive exploration of the peoples and cultures of the Himalayas. Ethnographic materials draw on the lifeways of populations living in the Himalayan regions of Bhutan, India, Nepal, and Tibet. Some of the cultural issues to be examined through these sources include images of the Himalayas in the West, forms of social life, ethnic diversity, political and economic history, and religious complexity.

#### **[ANTHR 343 Religion, Family, and Community in China @**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 344 Male and Female in Chinese Culture and Society (also Women's Studies 344) @**

Fall. 4 credits. Not offered 1998-99.]

#### **ANTHR 345 Japanese Society @**

Fall. 4 credits. T. Bestor.

A survey of the patterns of social structure and cultural identity in contemporary Japan, including ethnographic perspectives on: family; community; individual lifecourse (including gender, education, career, and aging); workplace, markets and economic organization; and public culture.

#### **[ANTHR 350 Topics in the Anthropology of Europe**

Spring. 4 credits. Not offered 1998-99.]

#### **ANTHR 355 Ancient Mexico and Central America (also Archaeology 355) @ #**

Spring. 4 credits. J. Henderson.

For course description, see section V.

#### **[ANTHR 377 The United States (also Latino Studies Program 377)]**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 433 Andean Thought and Culture @ #**

Spring. 4 credits. Not offered 1998-99.]

#### **[ANTHR 443 Religion and Ritual in Chinese Society (also Religious Studies 443) @**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 444 Japanese Social Organization @**

Spring. 4 credits. Not offered 1998-99.]

#### **[ANTHR 456 Mesoamerican Religion, Science, and History @ #**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 477 Ethnology of Island Southeast Asia @**

Fall. 4 credits. Not offered 1998-99.]

#### **[ANTHR 493 Seminar in Archaeology (also Archaeology 493) @ #**

Fall. 4 credits. Not offered 1998-99.]

### Relevant courses in other departments

#### **BIOPL 247 Ethnobiology**

Fall. 3 credits. D. Bates.

#### **BIOPL 348 The Healing Forest**

Spring 2000. 2 credits. D. Bates, E. Rodriguez.

#### **[BIOPL 442 Current Topics in Ethnobiology**

Fall. 2 or 4 credits. E. Rodriguez.]

#### **GOVT 343/345 State, Society, and Language in Ancient Egypt (also Near Eastern Studies 368/369)**

343 fall; 345 spring. 4 credits. M. Bernal.

#### **HIST 255 Cultures and Ecology in Precolonial Africa**

Fall. 4 credits. S. Greene.

#### **HIST 391 Riot and Revolution in 19th-Century Africa**

Spring. 4 credits. S. Greene.

#### **HIST 407 The Colonial Encounter**

Spring. 4 credits. S. Greene.

#### **MUSIC 100 Popular Music in America**

Fall. 3 credits. M. Hatch.

#### **MUSIC 245 Gamelan in Indonesian History and Cultures**

Fall or spring. 3 credits. M. Hatch.

#### **MUSIC 445-446 Cornell Gamelan Ensemble**

445 fall; 446 spring. 1 credit. Prerequisite: permission of instructor. M. Hatch.

#### **MUSIC 604 Ethnomusicology: Areas of Study and Methods of Analysis**

Spring. 4 credits. M. Hatch.

### VIII. Graduate Seminars

The graduate program in anthropology is described in much greater detail in the Graduate Program brochure which is available through the Director of Graduate Studies. This document is also found on the Anthropology Department web page (<http://falcon.arts.cornell.edu/~anthro/>). The seminars described immediately below pertain to the program in socio-cultural anthropology. For information about graduate study in archaeology and biological anthropology, see the Anthropology Department web page.

A core set of seminars is required of all graduate students in socio-cultural anthropology: Anthropology 600, 601, and 602. Anthropology 603 is strongly recommended. These courses are open to graduate students from other related fields. This sequence, and the graduate curriculum in general, is premised on the idea that anthropology is best defined as the comparative study of human social life. This definition resists institutional pressures in the academy to distinguish social science from humanistic or cultural studies and scholarly from more worldly applications. Our most important method, ethnography, is at once scientific and humanistic; disciplinary aspirations refuse to view cultural interpretation and analytic explanation as separable

values. Furthermore, theory in anthropology is directly related to practice in the world whether in relation to research or more action-oriented pursuits. Consequently, the core sequences as well as most other courses for graduate students are oriented explicitly toward subverting an ideological construction of social life as separable into cultural and social (or political-economic) domains.

**ANTHR 600 Proseminar: Culture and Symbol**

Fall. 6 credits. D. Holmberg.  
This course focuses on an appreciation of symbolic, expressive, and representational forms and processes both as producers and products of social activities. Through the study of symbolic anthropology, structuralism, exchange, myth and ritual, religion, gender, personhood, linguistics, semiology, etc., we will investigate how identity and meaning are linked to the practical exigencies of social life. While emphasizing aspects of the discipline generally associated with cultural anthropology, the course will endeavor to set the stage for a dialectical understanding of social, political, economic, and symbolic activities as interrelated phenomena. The works of de Saussure, Levi-Strauss, Dumont, Geertz, Victor Turner, Sahlins, among others, as well as contemporary theories are given careful attention.

**ANTHR 601 Proseminar: Social Organization**

Spring. 6 credits. T. Turner.  
This course focuses on linkages between culture and social institutions, representations and practices. The nature of these linkages is debated from strongly contesting points of view in social theory (structuralist, poststructuralist, utilitarian, hermeneutic, Marxist). Unlike debates in critical theory where the form of contestation has been mainly philosophical, in anthropology, these issues have developed in ethnographic analyses. The course briefly surveys kinship theory and economic anthropology with a focus on implications for general issues in social theory. Discussion of attempts to develop dialectical syntheses around the motion of "practice" follows. The issues addressed in this section carry over into the next, colonialism and post-colonialism, in which poststructuralist readings of history are counterposed to Marxism ones. Finally, Lacanian and Marxist visions of ideology as they relate to anthropological theory and ethnographic analysis are examined with particular emphasis on the cultural and social production of persons.

**ANTHR 602 The Practices of Anthropology**

Fall. 4 credits. D. Greenwood.  
The course builds on the foundation of the proseminars but broadens the concept of anthropological practices to include issues about the relations between theory and method, practice/theory relationships, the ethnography of anthropological practices themselves, the examination and critique of the concept of "participant observation," and a consideration of "ethical practices" in anthropology. The centerpiece of the seminar is the connection between the students' own intellectual and existential commitments and their anthropological "practices" and between these and their own emerging research projects.

**[ANTHR 603 Research Design]**  
Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 604 Praxis and Culture]**  
Spring. 4 credits. Not offered 1998-99.]

**ANTHR 605 Archaeological Research Design (also Anthropology 405 and Archaeology 405/605)**

Spring. 4 credits. Prerequisite: permission of instructor. J. Henderson, T. Volman.

For course description, see Anthr 405, section VI.

**ANTHR 607 Special Problems in Anthropology**

Fall or spring. Credit and hours to be arranged. Intended for graduate students only. Staff.

Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

**[ANTHR 609 Approaches to Archaeology (also Anthropology 409 and Archaeology 409/609)]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 610 Language and Myth]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 614 Reading in the Ethnographic Tradition (1880-1960) @]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 615 Reading Contemporary Ethnographies (1960-1990) @]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 616 Cultural Production of the Person]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 619 Anthropological Approaches to the Study of Buddhism in Asia @]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 621 Sex and Gender in Cross-Cultural Perspective (also Anthropology 321 and Women's Studies 321/631)**

Fall. 4 credits. Time to be arranged.

Graduate section of Anthr 321. K. March.  
For course description, see Anthr 321, section VII.A.

**[ANTHR 629 Chinese Ethnology @]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 632 Andean Symbolism @]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 635 Southeast Asia: Readings in Special Problems @**

Fall or spring. Credit and hours to be arranged. Staff.

Independent reading course on topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

**[ANTHR 636 Cognition and Classification]**  
Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 637 Theorizing Social Movements, Human Rights and Democracy in Latin America @]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 639 The Feminine Symbolic]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 641 South Asia: Readings in Special Problems @**

Fall or spring. Credit and hours to be arranged. Staff.

Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

**[ANTHR 645 Japanese Ethnology @]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 647 Death of the Father]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 648 Marriage and Death]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 649 Narrative and the Analysis of Culture]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 653 Myth Onto Film (also Theatre Arts 653)]**

Fall. 4 credits. Not offered 1998-99.]

**ANTHR 655 East Asia: Readings in Special Problems @**

Fall or spring. Credit and hours to be arranged. Staff.

Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

**[ANTHR 656 Maya History @]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 658 Archaeological Analysis (also Anthropology 458 and Archaeology 458/658) @]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 660 Latino Languages, Ideology and Practice (also Latino Studies Program 660)**

Spring. 4 credits. V. Santiago-Irizarry.

Hispanic ethnic identity in the U.S. is often organized around the use of Spanish and the issues this raises in an English-dominant society. Drawing from anthropological studies on language as a signifying practice, this course will look at the place of language in the life of Hispanic populations in the United States. Topics to be explored will include linguistic diversity and change, language as an instrument of accommodation and resistance, language maintenance and shift, culturally specific linguistic ideologies, and institutional applications of language.

**ANTHR 662 Democratizing Society: Participation, Action, and Research (also Anthropology 362)**

Fall. 4 credits. D. J. Greenwood.

For description, see ANTHR 362, Section VI.

**[ANTHR 663 Action Research]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 665 Topics in Native American Societies and Cultures**

Spring. 4 credits. B. Lambert.

This seminar is intended for undergraduate and graduate students in any field who are prepared to undertake independent research in American Indian Studies. I am particularly interested in how materials from Native American cultures can be used to help solve problems of general anthropological significance and in the contributions Native Americans have made to anthropological and sociological knowledge as teachers and

researchers. However, students will be encouraged to pursue their own interests and will be expected to discuss work in progress with other members of the seminar. A reading list will be developed to provide a shared background for discussions.

**ANTHR 670 Environmental Archaeology (also Anthropology 370 and Archaeology 370/670)**

Fall. 4 credits. Prerequisite: two previous courses in archaeology or permission of instructor. T. Volman.

For course description, see Anthr 370, section IV.

**ANTHR 673 Human Evolution: Concepts, History and Theory (also Biological Sciences 673)**

Fall. 4 credits. Prerequisite: one year of introductory biology, Anthropology 101, or permission of instructor. Offered alternate years. K. Kennedy.

The historical background of present-day concepts of man's evolutionary variations and adaptations in space and time is surveyed. The formation of biological anthropology as an area of specific inquiry within the social and biological sciences is reviewed. Students select their own topics within a broad range of readings in the history of Western concepts of reading origins, diversity, and place in nature.

**[ANTHR 675 Evolutionary Theory and Human Behavior (also Anthropology 475)]**

Spring. 4 credits. Not offered 1998-99.]

**[ANTHR 680 Theory and Ethnography in the Anthropology of Southeast Asia @]**

Fall. 4 credits. Not offered 1998-99.]

**[ANTHR 682 Perspectives on the Nation (also Asian American Studies 682)]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 685 Mothers, Priests, Rebels, and Indian Chiefs: New Social Movements in Latin America @**

Spring. 4 credits. B. J. Isbell.

For course description, see Anthr 485, section VII.A.

**[ANTHR 690 Ritual and Myth: Structure, Process, Practice @]**

Spring. 4 credits. Not offered 1998-99.]

**ANTHR 691 Filming Other Cultures (also Anthropology 291 and Theatre Arts 291/691) @**

Spring. 4 credits. Fee for film screening and maintenance, \$35.

For description, see Anthropology 291 and Theatre, Film and Dance 291. Graduate students who register in this course attend the meetings of 291. In addition, they write in-depth studies of one or more films in consultation with the instructor.

## ARABIC AND ARAMAIC

See under Department of Near Eastern Studies.

## ARCHAEOLOGY

See under Special Programs and Interdisciplinary Studies.

## ASIAN AMERICAN STUDIES

See under Special Programs and Interdisciplinary Studies.

## ASIAN STUDIES

K. W. Taylor, chair (388 Rockefeller Hall, 255-5095); B. R. Anderson, R. Barker, M. G. Bernal, D. Boucher, K. Brazell, T. Chaloeintarana, S. Cochran, R. D. Colle, E. W. Coward, Jr., B. de Bary, C. d'Orban, E. C. Erickson, S. Feldman, G. Fields, J. W. Gair, D. Gold, E. M. Gunn, M. Hatch, D. Holmberg, M. Katzenstein, K. A. R. Kennedy, A. T. Kirsch, J. V. Koschmann, F. Kotas, J. Krier, J. M. Law, L. C. Lee, T. Lyons, B. G. MacDougall, K. March, T. L. Mei, C. Minkowski, S. Mohanty, V. Nee, S. J. O'Connor, C. A. Peterson, J. R. Piggott, T. Poleman, A. Riedy, N. Sakai, P. S. Sangren, V. Shue, J. T. Siegel, R. J. Smith, K. Taylor, N. Uphoff, J. Whitman, J. U. Wolff, D. Wyatt, M. W. Young

The Department of Asian Studies encompasses the geographical areas of East Asia, South Asia, and Southeast Asia and offers courses in most of the disciplines of the social sciences and the humanities. Asian studies courses through the 400 level (ASIAN is the prefix) are taught in English and are open to all students in the university. Some of these courses may be counted toward majors in other departments; others fulfill the humanities distribution requirement. Courses listed under Asian Studies offered through other departments may fulfill distribution requirements in history, social sciences, and arts.

### The Major

The applicant for admission to the major in Asian studies must have completed at least one area studies course selected from among those listed under the Department of Asian Studies and must receive permission for admission to the major from the director of undergraduate studies. The student must have received a minimum grade of C in this course and in all other courses counted toward the major.

A student majoring in Asian studies is required to complete two courses at the 200 level (a minimum of 6 credits with a grade of C or better) in one of the Asian languages offered at Cornell. The major consists of at least 30 additional credits (which may include up to 6 credits of further language study) selected by the student in consultation with his or her adviser from among the courses listed under the Department of Asian Studies and numbered 250 and above. Majors in Asian studies normally specialize in the language and culture of one country and often choose an additional major in a traditional discipline.

### Honors

To be eligible for honors in Asian studies, a student must have a cumulative grade average of A- in all Asian Studies area courses, exclusive of language study only, and must successfully complete an honors essay during the senior year. Students who wish to be considered for honors should apply to the director of undergraduate studies during the second term of their junior year. The application must include an outline of the

proposed project and the endorsement of a faculty adviser. During the first term of the senior year the student does research for the essay in conjunction with an appropriate Asian studies course or Asian Studies 401. Students of China, Japan and Southeast Asia must also complete Asian Studies 611, 612 or 613 respectively. By the end of the first term the student must present a detailed outline of the honors essay and have it approved by the faculty sponsor and the director of undergraduate studies. The student is then eligible for Asian Studies 402, the honors course, which entails writing the essay. At the end of the senior year, the student has an oral examination (with at least two faculty members) covering both the honors essay and the student's area of concentration.

### Concentration in South Asia Studies

A candidate for the Bachelor of Arts or Science degree at Cornell may take a concentration in South Asia Studies by completing at least 18 credits of course work in South Asian studies, including Asian Studies 215 (Introduction to South Asia) and four courses or seminars at the intermediate or advanced levels, two of which may be South Asian language courses.

Students taking a concentration in South Asian studies are considered members of the South Asia Program and will have an adviser from the program faculty. (This adviser will be for the student's concentration and is not a substitute for a student's academic adviser in his or her major.)

One South Asian graduate course may be taken for the concentration with consent of both the instructor and the adviser. The same applies for one South Asia-related course with a research paper on a South Asian subject. Additional courses may be added if offered with comparable South Asia content.

### Concentration in Southeast Asia Studies

A candidate for the Bachelor of Arts or Bachelor of Science degree at Cornell may take a concentration in Southeast Asia studies by completing 18 credits of course work. A recommended plan would include Asian Studies 208 and four courses at the intermediate or advanced stage, two of which could be a Southeast Asian language. Students taking a concentration in Southeast Asia studies are members of the Southeast Asia Program and are assigned an adviser from the program faculty. Such students are encouraged to commence work on a Southeast Asian language either at the 10-week intensive courses offered by the Southeast Asia Studies Summer Institute or by studying for one semester at IKIP Malang, Indonesia; Khon Kaen University, Thailand; and Hanoi University, Vietnam; fellowships are available for undergraduates through the Cornell Abroad Program.

### Intensive Language Program (FALCON)

For those students desiring to accelerate their acquisition of Chinese, Japanese, or Indonesian, Cornell offers a full-time intensive language program, the Full-Year Asian Language Concentration (FALCON). FALCON students spend six hours a day, five days a week, for periods of up to a full year studying only the language and thus are able to complete as many as twelve hundred hours of



supervised classroom and laboratory work in one year. For further information, students should contact the FALCON Program Office, Department of Modern Languages, 414 Morrill Hall (telephone: 607/255-6457, e-mail: FALCON@cornell.edu).

## Study Abroad

Cornell is a member of the Inter-University Center for Chinese Language Study in Taipei and a member of the Council on International Educational Exchange offering study in China at Peking University and Nanjing University. These centers offer intensive training in both spoken and written forms of the languages. The Kyoto Center for Japanese Studies (KCJS) is an undergraduate program for students who want to spend one or two semesters in Japan studying both language and culture.

Cornell is a class-A member of the American Institute of Indian Studies, which offers fellowships in India for intensive language study in Hindi, Bengali, and Tamil.

Cornell and the central campus of the Nepalese national university—Tribhuvan—at Kirtipur, Kathmandu, cosponsor an academic semester or year in Nepal.

Other opportunities include a junior year abroad at IKIP-Malang, in Indonesia, or at the School of Oriental and African Studies, University of London. Many other options for study in Asia exist, including in Indonesia, Thailand, and Vietnam through the Council for International Educational Exchange. Undergraduates should consult Cornell Abroad; graduate students should inquire at the East Asia Program, the South Asia Program, or the Southeast Asia Program offices.

## General Education Courses

### ASIAN 208 Introduction to Southeast Asia @

Spring. 3 credits. T. Chaloeontiarana. This course is for anyone curious about the part of Asia with the most diversity; it defines Southeast Asia both as the nation-states that have emerged since 1945 (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Viet Nam) and as a larger cultural world extending from southern China to Madagascar and Polynesia. Students will find a serious, organized introduction to a variety of disciplinary and topical approaches to this region, including geography, linguistics, history, religion and ideology, anthropology, marriage and family systems, music, literacy and literature, art and architecture, agriculture, industrialization and urbanization, politics and government, warfare and diplomacy, ecological and human degradation, business and marketing. The course aims to teach both basic information and different ways of interpreting that information.

### ASIAN 211 Introduction to Japan @

Fall. 3 credits. B. de Bary. An interdisciplinary introduction to Japanese society and its history especially designed for students not majoring in Asian Studies. The first part of the course focuses on the historical changes in Japanese society from the eighth century down to the nineteenth century; the second part analyzes modern society from a variety of perspectives. It also addresses the question of how Japan is

represented in the U.S. mass media. Guest lecturers from five or six different fields offer their opinions on Japanese history, culture, and politics.

### ASIAN 212 Introduction to China @

Spring. 3 credits (4 credits with a special project; consult instructor for information). Staff.

An interdisciplinary introduction to Chinese culture especially designed for students not majoring in Asian Studies.

### ASIAN 215 Introduction to South Asian Civilization @

Fall. 3 credits (4 credits with a special project; consult instructor for information). D. Gold.

An interdisciplinary introduction to the culture and history shared by India and other states of South Asia. Designed for students not majoring in Asian Studies. Guest lecturers will provide the perspective of their disciplines to the general themes of the course: cultural diversity and the role of tradition in contemporary life.

### ASIAN 218 Introduction to Korea @

Fall. 3 credits. Y. Kim. An interdisciplinary introduction to Korean history and culture, including geography, ethnography, language, literature, philosophy, religion, political economy, government, music, and art (sculpture, architecture, and painting), with an overview of Korean history from the Three Kingdoms Period to the present, focusing on the March 1, 1919, Independence Movement, the Korean War, the 1960 Student Revolution, the 1980 Kwangju Massacre, and other events.

## Asia—Literature and Religion Courses

The following courses are taught entirely in English and are open to any Cornell student.

### ASIAN 250 Introduction to Asian Religions (also Religious Studies 250) @ #

Spring. 3 credits. D. Boucher. A survey of the major religious traditions of India, China, and Japan, focusing on Vedic ritual and Brahmanical Hinduism; Indian, Chinese, and Japanese Buddhism; the native Chinese traditions of Confucianism and Taoism; and Shinto, Confucianism, and the new religions in Japan. Emphasis will be on the great traditions of these cultures, with frequent reference to the differing realms of popular religions.

### ASIAN 277 Meditation in Indian Culture

Spring. 3 credits. D. Gold. This course probes the truths behind traditional claims of the priority of internal practice in Indian traditions. We will examine both practices themselves—techniques of meditation and contemplation, religious ways of using intellect, forms of chant and ritual—and the dynamics through which these have left a wider mark on South Asian civilization. These dynamics include not only the evident reverberations of practice in philosophical reflection and socioreligious institutions, but also wide-ranging processes of stylization, elaboration, and popularization found throughout South Asian culture. In order to get a sense of the experiences treated in classical religious texts, students will be expected to experiment with some basic meditation practices. At least as important for

the work of the course (and much more important for the grade) will be the ways in which students situate these practices within larger South Asian world views as suggested by doctrines, rituals, iconic forms, and literary texts. To keep the interaction between internal practice and broader world views central, we will examine both Hindu and Buddhist sources, consistently examining the ways in which similar practices are given distinct shapes by the two religious traditions.

### [ASIAN 291 Classical Indian Narrative (also Classics 291) @ #

Spring. 3 credits. Not offered 1998–99. C. Minkowski.

Reading in translation from the principal story collection of ancient India. Sources will include the Vedas, the Sanskrit epics, the Buddhist Jatakas, the Kathasaritsagara, the Pancatantra, and related collections. Attention will be given to comparisons with Greek narrative, and to the diffusion of Indian narratives into the world's literature.]

### ASIAN 311 Modern Korean Culture and Literature @

Spring. 4 credits. Y. Kim. A survey of the literature of the Post-Liberation period (1945–present), with an emphasis on the development of modern Korean poetry and its relation to the intellectual history of this time. Students will read major poetic texts of each period in English translation as well as writings on cultural movements and major arguments in intellectual history.

### [ASIAN 313 Japanese and Asian Film (also Theatre Arts 313 and Comparative Literature 313) @

Spring. 4 credits. Not offered 1998–99. B. deBary.

The course will explore the relationship between thematic and formal concerns of Japanese film and narratives of modern Japanese history dealing with such issues as the nature of the Meiji Restoration, the rise of Taisho commodity culture, the Pacific War, postwar reconstruction, postmodernity and "new nationalism." Weekly analyses of specific films will be accompanied by readings that provide historical context and pose relevant interpretive and theoretical questions, particularly those of gender and cultural difference. Study of works by Ozu, Mizoguchi, Kurosawa, and Naruse will constitute the introductory portions of the course, followed each year by a series featuring recent works of contemporary directors.]

### ASIAN 347 Tantric Traditions (also Religious Studies 349) @ #

Fall. 4 credits. D. Gold. This course treats the development of tantric traditions in the Indian subcontinent and beyond. Philosophical, socio-religious, cultic, and visionary dimensions of tantra will be discussed. We study different Hindu and Indo-Tibetan traditions, with some attention also paid to tantric developments in East Asian Buddhism.

### ASIAN 348 Indian Devotional Poetry

Spring. 4 credits. D. Gold. A survey of devotional genres in the Indian vernacular literatures. Readings in translation.



**[ASIAN 351 The Religious Traditions of India (also Religious Studies 351) @ #**

Spring. 4 credits. Not offered 1998-99. D. Gold.

A study of the relationships between the main currents of Indian religion. The course will first focus on the Hindu tradition and its holistic worldview within the context of the caste system. It will then describe the rise of Jainism and Theravada and Mahayana Buddhism, as well as Hindu and Buddhist Tantrism, as religious phenomena reflecting the emergence of individualism.]

**[ASIAN 354 Indian Buddhism (also Religious Studies 354) @ #**

Fall. 4 credits. Not offered 1998-99. C. Minkowski.

A survey of Buddhist tradition in India from the life of the Buddha through the formation of the early schools, to the development of the Mahayana and the emergence of tantric Buddhism. Topics to be considered will include Buddhist concerns of human suffering and spiritual liberation, the nature of reality and human understanding, and the importance of compassion and emptiness. Attention will be paid to the institutional identity and social function of the Buddhist movements in classical India.]

**[ASIAN 355 Japanese Religions (also Religious Studies 355) @**

Fall. 4 credits. J. M. Law.

This course addresses the complexity of religion in Japanese history through a focus on the dominant ideological system of Japanese religious practice and thought—that system commonly referred to as Shinto. In this course, we are interested in understanding the general methodological issues surrounding tradition formation, continuity, change, and revision. The Shinto case reveals the complexity of a given religious system which simultaneously serves as both a cultural ideology and a path for individual spiritual cultivation. A study of Shinto allows us to develop the intellectual frameworks for understanding the dynamics of religious traditions in societies. We will explore the Shinto tradition by looking at 1) the means by which a central corpus of values, tastes, practices, beliefs and concerns have been formulated and how this system has interacted with other religious systems in Japan so as to maintain its right to represent the “authentic Japanese spirit;” 2) the academic sources for the study of the Shinto tradition which have also contributed to its identity and continuity; 3) the view of this religious system from the perspective of those who are actively shaping its discourse; 4) the view of this religious system from the perspective of those peripheralized by its ideologies; 5) the issue of personal cultivation and aesthetic taste in the tradition and 6) the relationship between this religious system and imperialism, war, and historical revisionism.

**[ASIAN 357 Chinese Religions (also Religious Studies 357) @ #**

Fall. 4 credits. Not offered 1998-99.]

**[ASIAN 358 Chinese Buddhism (also Religious Studies 358) @ #**

Fall. 4 credits. D. Boucher.

**[ASIAN 359 Japanese Buddhism: Texts in Context (also Religious Studies 359) @ #**

Spring. 4 credits. J. M. Law.

**[ASIAN 360 Buddhist and Confucian Cultures of Asia @ #**

Spring. 4 credits. K. Taylor.

Confucius and Buddha were contemporaries 2,500 years ago. Teachings attributed to them spread over large parts of Asia and were used to formulate expressions of cultural authority in many times and places. This course surveys historic themes in Buddhist and Confucian studies, such as Theravada and Mahayana, Pure Land, Zen, and other forms of Buddhist thought and practice, including interaction with and adaption to local religions; Confucius and Mencius, Han eclectic Confucianism, Song Chu Hsi Confucianism, and dissenting or variant forms of Confucian thought. This course explores and compares specific examples of these themes in Japan, Korea, China, Vietnam, Thailand, and Burma. This course is intended for Asian studies majors and other interested students. Premodern focus.

**[ASIAN 363 Contemporary Mass Culture in Japan and the U.S. (also Comparative Literature 343) @**

Fall. 3-4 credits. Not offered 1998-99.

B. de Bary.

A comparative study of Japanese and American mass cultures. Rather than seeking, through comparison, to delineate distinctive models of national cultures, the course will trace the complex relationships between cultural nationalist impulses and transnational economies, emphasizing processes of hybridity and fusion. The course will introduce students to a small number of important theoretical writings on mass culture. Areas of study will include the analysis of science fiction, comic books, film and video, popular music, and toy industries. Enrollment limited to 25 students.]

**[ASIAN 373 Twentieth-Century Chinese Literature @**

Fall. 4 credits. Not offered 1998-99.

E. Gunn.

A survey of the principal works in English translation, the course introduces fiction, drama, essays, and poetry of China beginning with the Republican era and continuing up to the present in the People's Republic and Taiwan, with attention to social and political issues and literary theory.]

**[ASIAN 374 Chinese Narrative Literature @ #**

Spring. 4 credits. E. Gunn.

Selected works in classical Chinese fiction are read in translation. Major novels, such as *The Dream of the Red Chamber* and *Water Margin*, are emphasized.

**[ASIAN 375 Japanese Poetry and Poetic Prose @ #**

Spring. 4 credits. Alternates with ASIAN 377. Not offered 1998-99. K. Brazell.]

**[ASIAN 376 Modern Japanese Literature: From Meiji through the Pacific War (also Comparative Literature 369) @**

Fall. 4 credits. B. de Bary.

We will read Japanese works of fiction, poetry, and critical theory written from the Meiji Restoration into the Showa Period. The course will take up such issues as modernization and the narrative of discovery, imperialism and the non-Western novel, the politics of visibility, gender and representation, and Japanese colonialism. We will consider how writings of critics like Karatani, Fujii, and Layoun have complicated modernizationist schemas of literary development. We will also

attempt to explore what Nagahara Yutaka has called the “phenomenology of discrimination” in relation to Japanese literary texts, pursuing contradictions between egalitarianism and discrimination in the legacy of Meiji Enlightenment thought. Reading of non-Japanese (other Asian, as well as African, American, and European) texts raising pertinent theoretical perspectives will be integrated into the course work.

**[ASIAN 377 Japanese Tales of Love, War, and the Supernatural @ #**

Spring. 4 credits. Alternates with ASIAN 375. K. Brazell.

The romantic adventures of the Shining Prince Genji, the battles of 12th-century samurai clans, the ghosts and demons of folklore, and the adventures of Saikaku's men and women who “loved love” are still very much alive in modern Japanese mass culture—in films, comic books, commercials, TV programs, and video games. This course will survey the original tales (in English translation) to introduce students to this rich array of literature. We will explore some of the changes in the representations of sex and gender, death and dying, and supernatural forces that occurred between the 9th and the 19th centuries. There are no prerequisites.

**[ASIAN 383 Introduction to the Arts of China**

See ART H 380 for description.

**[ASIAN 390 The Sanskrit Epics @ #**

Spring. 4 credits. C. Minkowski.

Readings in translation from the two Sanskrit epics, the Mahabharata and the Ramayana, supported by a study of the reception of the epics in later Indian imaginative literature. Attention will also be given to comparative theories of the epic in ancient Indo-European languages.

**[ASIAN 393 Images of Humanity in Medieval China (also History 393) @ #**

Not offered 1998-99. C. Peterson.

See HIST 393 for description.]

**[ASIAN 395 Classical Indian Philosophical Systems (also Classics 395 and Religious Studies 395) @ #**

Fall. 4 credits. Prerequisite: some background in philosophy or in classical culture. C. Minkowski.

**[ASIAN 406 Contemporary Literary Criticism in Korea**

Spring. 4 credits. Y. Kim.

A survey of literary criticism and theory from the liberation in 1945 to the 1990s, including the KAPF (engagement movement of nationalism) versus belletristic movement, new criticism, nationalism based upon realism, grass-roots literature movements, postmodernism and the heteroglossia of critical theories. Major arguments of each of these movements will be covered. Also covered will be current movements in Korean literary criticism influenced by the globalized industry of critical theories, including deconstruction, postmodernism, poststructuralism, postcolonialism, cultural studies, feminism, and new historicism.

**[ASIAN 410 Chinese Performing Arts @**

Spring. 4 credits. Not offered 1998-99. E. Gunn.

The course will survey drama, music theater, and film in twentieth-century China. Some material will require knowledge of Chinese.]

**ASIAN 415 Virtual Orientalisms and the Representation of Japan** #

Spring. 4 credits. B. de Bary.  
See S HUM 415 for description.

**ASIAN 422 Islam in China and Southeast Asia (also Near Eastern Studies 453 and SHUM 430)** @ #

Fall. 4 credits. J. Armijo-Hussein.  
At present the world's Muslim population is estimated to be 1 billion. And although many people equate Islam with Arabs, the majority of Muslims live outside the Arab Middle East. This course will concentrate on the history of the Muslim communities spread across Southeast Asia and China: their early history and development, as well as recent movements throughout the region to both revive and strengthen Islam. We will be concentrating on large Islamic communities including those in Malaysia, Philippines, Brunei, Cambodia, Myanmar, Vietnam, and Thailand. The issues we will be addressing include: the changing role of women in Muslim communities; the recent revival of Islamic education; and the increasing use of Islam as a political force. We will also examine the common belief that Islamist movements are inherently anti-Western, anti-democratic, and anti-modern.

**ASIAN 423 The Role of Women in Islamic Societies (also Near Eastern Studies 457 and SHUM 423)** @ #

Spring. 4 credits. J. Armijo-Hussein.  
Islam is often perceived as a religion inherently oppressive of women, and yet throughout the Muslim world today, it is often the most highly dedicated Muslim women who are the most active supporters of Islamist movements. This course will begin with a survey of early Islamic history, including the important role played by women in the development of the mystical traditions within Islam, and will focus on close readings of Islamic texts. The role of women in Muslim societies will then be surveyed over time and place. As the vast majority of Muslims live outside the Arab Middle East, emphasis will also be placed on the Muslim societies of sub-Saharan Africa, southeastern Europe, Central Asia, the Sub-Continent, Southeast Asia and China. Other topics will include the role of education, the changing political and religious significance of the veil, and the depiction of women in popular literature and culture.

**[ASIAN 440 Meditation Schools of East Asian Buddhism (also Religious Studies 440)]** @ #

Spring. 4 credits. Prerequisite: ASIAN 250 or equivalent. Not offered 1998-99.]

**ASIAN 441 Mahayana Buddhism (also Religious Studies 441)** @ #

Spring. 4 credits. D. Boucher.  
By reading successive examples of Mahayana Buddhist literature, we will study the formation and evolution of the ideal of the bodhisattva; the understanding of transcendental wisdom and the concept of emptiness; and the workings of both the conscious and subconscious mind in the course of spiritual practice. We will include discussion of major philosophical schools, as well as issues of social setting and popular religious practice, in both India and East Asia.

**ASIAN 449 History and Methods of the Academic Study of Religion (also Religious Studies 449)** #

Spring. 4 credits. J. M. Law.  
See RELST 449 for description.

**[ASIAN 460 Indian Meditation Texts (also Religious Studies 460)]** @ #

Spring. 4 credits. Not offered 1998-99.  
D. Gold.

Because texts that record visionary experience, prescribe the practice of contemplation, and present enigmatic utterances are highly valued in Indian tradition, they need to be taken seriously by students of Indian and world civilizations. Yet the special problems of interpretation that they present have often caused meditation texts to be passed over in embarrassed, sometimes reverent silence. In this course we will draw on approaches from literary criticism, anthropology, and religious studies to explore a number of the problems to which these texts give rise: In what ways are the apparent differences in experience presented in meditation texts shaped by different cosmologies and ritual practice? Do different literary genres have particular religious implications? What are the relations between convention and experience in the creation of the texts? Readings will be drawn from the Upanishads and Tantra, devotional verse in the vernaculars, and the classical meditation manuals of Hinduism and Buddhism. Some attention may be given to Indian Sufi materials. No knowledge of Indian languages is required.]

**ASIAN 463 Readings in Hindi and Urdu Literature** @

Spring. 4 credits. D. Gold.  
Selected topics in Hindi and Urdu literature, with readings in the original; discussions in Hindi-Urdu and English. May be repeated for additional credit with consent of instructor.

**[ASIAN 464 Readings in Urdu Literature]** @

Spring. 2-4 credits. Not offered 1998-99.  
D. Gold.

Selected topics in Urdu literature, with readings in the original; discussions in Urdu and English.]

**ASIAN 470 The Japanese Noh Theater and Modern Dramatists (also Comparative Literature 470 and Theater Arts 470)** @ #

Fall. 4 credits. Alternates with ASIAN 471.  
K. Brazell.

Several weeks will be spent studying the literary, performance, and aesthetic aspects of the noh theater. Emphasis will be on noh as a performance system, a total theater in which music, dance, text, costume, and props all interact to create the total effect. Then attention will turn to modern theater people who have reacted to noh in some creative way. Choice of dramatists will depend partly on student interests but will probably include Yeats, Brecht, Britten, Claudel, Grotowski, and Mishima. All readings may be done in English translation.

**[ASIAN 471 Japanese Theatre (also Theatre Arts 471)]** @ #

Fall. 4 credits. Alternates with ASIAN 470.  
Not offered 1998-99. K. Brazell.

A study of traditional forms of Japanese theatre. Topics will include ritual and theatre, noh and kyogen, kabuki, and the puppet theatres, and contemporary theatrical use of the traditional forms. Special emphasis will be placed on dramaturgy, acting styles, performance aesthetics, and theories of performer training.]

**ASIAN 481 Translation and Identities** @

Fall. 4 credits. N. Sakai.

**[ASIAN 483 Internationalism, Nationalism, and Modern Japanese Discursive Space]** @

Fall. 3 credits. Not offered 1998-99.  
N. Sakai.

The late 19th century marks an important transitional period; nation-states formed in Britain, France, Japan, Germany, the United States, and elsewhere sought to become imperial powers; and "internationalism" virtually collapsed. Focusing on Japanese examples but not excluding other cases, we will study the discursive spaces of modern national subjectivity with a view to the problems of ethnicity, colonialism, imperial sexism, violence, historical memory, post-coloniality and academic knowledge. A major critical paper will be required.]

**ASIAN 496 Tokugawa Literature and Thought** @ #

Spring. 4 credits. N. Sakai.  
An introduction (in English translation) to literary, theatrical, and intellectual works of the Tokugawa period (1600-1868). We will examine the characteristics of early Tokugawa literary and theatrical works and see how different they are from the literary works of the later Tokugawa period. We will also read the philosophical and philological works on the classics by writers such as Ogyu Sorai and Motoori Norinaga to understand the ways contemporary Japanese intellectuals understood cultural activities and literature during the Tokugawa period.

**Asia—Graduate Seminars**

For complete descriptions of courses numbered 600 or above, consult the director of graduate studies.

**ASIAN 601 Seminar: The Philippines (also Government 652)**

Fall. 3-4 credits. B. Anderson.  
This reading seminar will focus on the major scholarly works dealing with the modern social history, politics, cultures, and economic problems of the twice-colonized Philippines. The framework will be provided by theories of colonialism, nationalism, and decolonization, and by comparisons with other parts of Southeast Asia and Latin America.

**ASIAN 602 Southeast Asia Seminar: Topic TBA**

Spring. 4 credits. Staff.

**ASIAN 605-606 Master of Arts Seminar in Asian Studies**

605, fall; 606, spring. 2-4 credits. Staff.

**ASIAN 607-608 The Plural Society Revisited (also Government 653)**

Spring. 4 credits. 607 may be taken independently for credit; 607 is a prerequisite for 608. B. Anderson.  
See GOVT 653 for description.

**ASIAN 609 Modern Japanese Studies: The Formation of the Field in History and Literature (also History 609)**

N. Sakai, J. V. Koschmann.  
See HIST 609 for description.

**ASIAN 611 Chinese Bibliography and Methodology**

Spring. 1 credit. Prerequisite: permission of instructor. Required of honors students and M.A. candidates. C. d'Orban.

**ASIAN 612 Japanese Bibliography and Methodology**

Fall. 1 credit. Prerequisite: permission of instructor. Required of honors students and M.A. candidates. F. Kotas.

**ASIAN 613 Southeast Asian Bibliography and Methodology**

Fall. 1 credit. Prerequisite: permission of instructor. A. Riedy.

This course is designed to instruct students in methods of identifying and locating sources for the study of Southeast Asia. Emphasis will be on the practical aspects of using various types of bibliographical tools to identify both primary and secondary sources in Southeast Asian and Western languages. Electronic databases and online services as well as traditional printed resources will be covered. Relevant arcana of library science will be explained as necessary. Required of honors students and Master of Arts candidates. No foreign language competence is required but a reading knowledge of at least one Southeast Asian language or other Asian language (especially Chinese or Japanese) and a major European language (especially French, Spanish, or Dutch) is highly desirable.

**[ASIAN 621-622 South Asia Seminar: Topic to be announced]**

621, fall; 622, spring. 4 credits. Not offered 1998-99.]

**ASIAN 623-624 Topics in South Asia**

623, fall; 624, spring. 1 credit. Staff. A series designed to introduce as well as enhance and build on students' knowledge of various topics of importance to South Asia (Bangladesh, India, Nepal, Pakistan, and Sri Lanka). Weekly lectures will survey contemporary themes in South Asian scholarship where visiting scholars and members of the Cornell community will discuss a multidisciplinary range of issues. These may include science and nation building; ritual power and resistance; tribal communities and the environment; industrial and agrarian relations; gender and the media; and economic liberalization. A short essay will be required at the end of the course.

**[ASIAN 630 Seminar in Translation Studies]**

Spring. 4 credits. Not offered 1998-99. K. Taylor.

A graduate seminar designed to introduce students to theoretical writings about, and related to, translation, conceived both as a linguistic exercise and as a broader field of cultural activity; will include the practice of translation. Limited to graduate students by permission of instructor; must have skill in Classical Chinese, French, or Vietnamese sufficient to begin translating.]

**[ASIAN 650 Graduate Seminar in Asian Religions]**

Spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. M. Law.]

**ASIAN 676 Southeast Asia Research Training Seminar**

Fall or spring. 3-4 credits. Staff.

**ASIAN 701-702 Seminar in East Asian Literature**

701, fall; 702, spring. 1-4 credits. Staff.

**ASIAN 703-704 Directed Research**

703, fall or spring; 704, fall or spring. 1-4 credits. Staff.

**Honors Courses****ASIAN 401 Asian Studies Honors Course**

Fall or spring. 4 credits. Intended for seniors who have been admitted to the honors program. Staff.

Supervised reading and research on the problem selected for honors work.

**ASIAN 402 Asian Studies Honors: Senior Essay**

Fall or spring. 4 credits. Prerequisite: admission to the honors program. Staff. The student, under faculty direction, prepares an honors essay.

**ASIAN 403-404 Asian Studies Supervised Reading**

Fall, spring, or both. 1-4 credits. Prerequisite: permission of instructor. Open to majors and other qualified students. Intensive reading under the direction of a member of the staff.

**Literature in Chinese****CHLIT 213-214 Introduction to Classical Chinese @ #**

213, fall; 214, spring. 3 credits each term. Prerequisite: qualification in Chinese or permission of instructor. May be taken concurrently with Chinese 101-102, 201-202, 301-302. T. L. Mei.

**CHLIT 420 T'ang and Sung Poetry @ #**

Spring. 4 credits. Prerequisite: permission of instructor. T. L. Mei. Readings in the original Chinese, together with secondary works by Chinese and Western critics.

**Advanced Readings****CHLIT 421-422 Directed Study**

Fall or spring. 2-4 credits each term. Prerequisite: permission of instructor. Staff.

**CHLIT 423 Readings in Chinese Literature**

Fall. 4 credits. T. Leshan. Han-Minority Relations in Chinese History: Selected Readings.

**CHLIT 424 Readings in Literary Criticism**

Fall or spring. 4 credits. Prerequisite: permission of instructor. T. L. Mei.

**CHLIT 426 History of the Chinese Language (also CHIN 403) @ #**

Fall. 4 credits. Prerequisite: reading knowledge of Chinese. T. L. Mei. This course explores the development of the Chinese language from its Sino-Tibetan beginnings to the present. Topics covered include changes in sound, vocabulary and grammatical structure, external influences, Old Chinese, Middle Chinese and historical origins of modern dialects.

**CHLIT 435 Chinese Buddhist Texts @ #**

Spring. 4 credits.

**CHLIT 603 Seminar in Chinese Fiction and Drama**

Fall. 4 credits. Prerequisite: permission of instructor. Staff.

**CHLIT 605 Seminar in Chinese Fiction and Drama**

Spring. 4 credits. Prerequisite: permission of instructor. Staff.

**CHLIT 610 Chinese Cultural Criticism**

Fall. 4 credits. E. Gunn.

**CHLIT 621-622 Advanced Directed Reading: Chinese Historical Syntax**

621, fall; 622, spring. 2-4 credits. Prerequisite: permission of instructor. Staff.

**Chinese Language**

See language courses in the Department of Modern Languages.

**FALCON Program—Chinese**

FALCON Program office, 255-6457, P. Button, director Chinese FALCON, 416 Morrill Hall, 255-9301.

**Literature in Japanese****JPLIT 406 Introduction to Classical Japanese @ #**

Spring. 4 credits. Prerequisite: permission of instructor. N. Sakai.

**[JPLIT 407 Advanced Classical Japanese]**

Spring. 4 credits. Prerequisite: JPLIT 406 or permission of instructor. Not offered 1998-99. K. Brazell.]

**JPLIT 421-422 Directed Readings**

421, fall; 422, spring. 2-4 credits. Prerequisite: for JPLIT 421, Japanese 402 or equivalent; for JPLIT 422, Japanese 421 or equivalent. Staff.

**[JPLIT 611 Seminar in Classical Japanese Literature]**

Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998-99. K. Brazell.]

**JPLIT 612 Seminar in Medieval Genres**

Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. K. Brazell.

This seminar will explore medieval literary genres in terms of the contemporary religious, social, political, and aesthetic discourses. Readings will be in classical and modern Japanese as well as in English.

**[JPLIT 613 Seminar in Tokugawa Culture and Thought: Otherness, Text, and Body]**

Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998-99. N. Sakai.]

**[JPLIT 614 Seminar in Modern Japanese Literature]**

Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998-99. N. Sakai.]

**Graduate-Level Reading Courses****[JPLIT 621 Advanced Readings in Pre-Modern Japanese Narrative Literature]**

Fall or spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1998-99. K. Brazell.]

**[JPLIT 622 Advanced Readings in Pre-Modern Japanese Poetry]**

Spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1998-99. K. Brazell.]

**[JPLIT 623 Advanced Readings in Pre-Modern Drama]**

Fall or spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1998-99. K. Brazell.]

**JPLIT 624 Advanced Readings in Modern Japanese Literature**

Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. N. Sakai.

**Japanese Language**

See language courses in the Department of Modern Languages.

**FALCON Program—Japanese**

FALCON Program office, 255-6457, R. Sukle, director, Japan FALCON, 412 Morrill Hall, 255-0734.

**Indonesian Language**

See language courses in the Department of Modern Languages.

**FALCON Program—Indonesian**

FALCON Program office, 255-6457, J. Wolff, director, Indonesian FALCON, 307 Morrill Hall, 255-0733.

**Literature in Korean****[KRLIT 405 Readings in Korean Literature]**

Fall. 4 credits. Not offered 1998-99.]

**[KRLIT 406 Korean Literature Translation Workshop @]**

Spring. 2-3 credits. Prerequisite: Korean 301-302 or equiv.; permission of instructor. Not offered 1998-99.]

**Vietnamese****VTLIT 222-223 Introduction to Classical Vietnamese @ #**

222, fall; 223, spring. 3 credits. Prerequisite: qualification in Vietnamese or permission of instructor. K. Taylor.

This is the first semester of a two-semester sequence of courses introducing students to Han (Classical Chinese as used in the Vietnamese language) and Nom (vernacular Vietnamese character writing). Students will learn to read Han and Nom texts, mostly from the 17th through 19th centuries, including historical records, prose writings, and poetry.

**Sanskrit****[SANSK 131-132 Elementary Sanskrit (also Classics 131-132 and Linguistics 131-132)]**

131, fall; 132, spring. 4 credits each term. Not offered 1998-99.

An introduction to the essentials of Sanskrit grammar. Designed to enable the student to read classical and epic Sanskrit as quickly as possible.]

**SANSK 251-252 Intermediate Sanskrit (also Classics 251-252 and Linguistics 251-252) @ #**

251, fall; 252, spring. 3 credits each term.

Prerequisite: Sanskrit 132 or equivalent.

A. Nussbaum, fall; C. Minkowski, spring.

Readings from the literature of classical Sanskrit. Fall: selections from the two Sanskrit epics, the Mahabharata and the Ramayana. Spring: more selections from the epics and selections from either Sanskrit story literature or from Sanskrit dramas.

**Literature in Sanskrit****[SNLIT 467-468 Reading in Sanskrit Literature: The Vedas @ #]**

Spring. 3 credits. Prerequisite: permission of instructor. Not offered 1998-99. C. Minkowski.]

**Related Courses in Other Departments and Colleges**

Check the primary department section for the offering status of the following courses. Courses in other colleges will count as College of Arts and Sciences credit only for Asian Studies majors.

**Asia/General Courses**

ABEN 754 Sociotechnical Aspects of Watershed Development (also GOVT 644)

ARME 464 Economics of Agricultural Development (also ECON 464)

ARME 660 The World's Food

ARME 665 Food and Nutrition Policy (also NS 685)

ARME 666 Economics of Development (also ECON 466)

ARME 667 Topics in Economic Development (also Economics 770)

ARME 764 Workshop in Public, Agricultural, and Development Economics (also Economics 784-788)

COMM 424/624 Communication in the Developing Nations

COMM 685 Training and Development: Theory and Practice (also INTAG 685 and EDUC 685)

CRP 777 Theories of Development and Underdevelopment

ECON 473 Economics of Export-Led Development @

GOVT 348 Politics of Industrial Societies

GOVT 349 Political Role of the Military

GOVT 648 Graduate Seminar in Political Economy of Change: Rural Development in the Third World

ART H 280 Introduction to Art History: Approaches to Asian Art @ #

ART H 580 Problems in Asian Art

ILRIC 637 Labor Relations in Asia

R SOC 205 Rural Sociology and International Development

**China—Area Courses**

ANTHR 655 East Asia: Readings in Specific Problems

ART H 380 Introduction to the Arts of China

ECON 469 Economy of China @

ECON 772 Economics of Development

GOVT 334 Political Economy of East Asia

GOVT 347 Government and Politics of China @

GOVT 438 Contemporary China: Political Economy

HIST 243 China and the West before Imperialism @ #

HIST 293 History of China up to Modern Times @ #

HIST 492 Undergraduate Seminar in Medieval Chinese History @ #

HIST 791-792 Seminar in Medieval Chinese History

ART H 481 The Arts in Modern China @

ILRIC 332-532 Labor in Developing Economies

**China—Language Courses**

CHIN 101-102 Elementary Standard Chinese

CHIN 109-110 Beginning Reading and Writing (Standard Chinese)

CHIN 111-112 Beginning Cantonese

CHIN 113-114 Beginning Reading for Cantonese Speakers

CHIN 161-162 FALCON @

CHIN 201-202 Intermediate Standard Chinese @

CHIN 215-216 Mandarin for Cantonese Speakers @

CHIN 301-302 Advanced Standard Chinese @

CHIN 303-304 Advanced Standard Chinese Conversation @

CHIN 411-412 Advanced Chinese: Focus on Fiction

CHIN 413-414 Advanced Chinese: Focus on Current Events

**Japan—Area Courses**

ANTHR 655 East Asia: Readings in Specific Problems

HIST 230 Japan and the Pacific War

HIST 298 State, Society, and Culture in Modern Japan @

HIST 420 Tale of Genji in Historical Perspective @ #

HIST 497 Premodern Japan-Historical Perspectives @ #

ILRHR 656 International Human Resource Management

ILRHR 690 Comparative Human Resource Management

ILRIC 333/533 Western Europe, United States, and Japan in a Changing World Economy

MUSIC 481 Japanese Music: Style and Tradition

NBA 580 Strategies for Global Competitiveness

NBA 589 Business in Japan

**Japan—Language Courses**

- JAPAN 101-102 Elementary Japanese
- JAPAN 123 Accelerated Introductory Japanese
- JAPAN 141-142 Beginning Japanese at a Moderate Pace
- JAPAN 161-162 FALCON @
- JAPAN 201-202 Intermediate Japanese Reading I @
- JAPAN 203-204 Intermediate Japanese Conversation @
- JAPAN 241-242 Intermediate Japanese at a Moderate Pace
- JAPAN 301-302 Intermediate Japanese Reading II @
- JAPAN 303-304 Communicative Competence @
- JAPAN 341-342 Advanced Japanese @
- JAPAN 401-402 Advanced Japanese Reading @
- JAPAN 404 Linguistic Structure of Japanese
- JAPAN 407-408 Oral Narration and Public Speaking
- JAPAN 410 History of Japanese Language @ #
- JAPAN 421-422 Directed Readings
- JAPAN 543-544 Intermediate Japanese for Business Purposes
- JAPAN 545-546 Advanced Japanese for Business Purposes

**South Asia—Area Courses**

- ANTHR 275 Human Biology and Evolution (also BIOES 275 and NS 275)
- ANTHR 339 Peoples and Cultures of the Himalayas @
- ANTHR 640-641 South Asia: Readings in Specific Problems
- ANTHR 673 Human Evolution: History, Concepts, and Theory (also BIOES 673)
- ARCH 342 Architecture as a Cultural System
- ARCH 441-442 Special Topics in Architectural Culture and Society
- ARCH 445 Architecture and the Mythic Imagination
- ARCH 446 Topics in Architecture, Culture, and Society
- ARCH 447 Architectural Design and the Utopian Tradition
- ARCH 448 The Indian Example and the Visual Tradition in Culture
- ARCH 647-648 Architecture in its Cultural Context I & II
- ARCH 649 Graduate Investigations in Architecture, Culture, and Society
- ARCH 667-668 Architecture in Its Cultural Context
- CRP 671 Seminar in International Planning
- ECON 475 Economic Problems of India
- HDFS 436 Language Development (also PSYCH 436 and LING 436)
- HDFS 633 Seminar on Language Development
- LING 701-702 Directed Research

**South Asia—Language Courses**

- BENGL 121-122 Elementary Bengali
- BENGL 201-202 Intermediate Bengali Reading @
- BENGL 203-204 Intermediate Bengali Composition and Conversation @
- BENGL 303-304 Bengali Literature I, II
- HINDI 101-102 Elementary Hindi-Urdu
- HINDI 109-110 Accelerated Elementary Hindi-Urdu
- HINDI 201-202 Intermediate Hindi Reading @
- HINDI 203-204 Intermediate Composition and Conversation @
- HINDI 301-302 Advanced Readings in Hindi Literature @
- HINDI 303-304 Advanced Composition and Conversation @
- HINDI 305-306 Advanced Hindi Readings @
- NEPAL 101-102 Elementary Nepali
- NEPAL 106 Intensive Nepali
- NEPAL 201-202 Intermediate Nepali Conversation @
- NEPAL 203-204 Intermediate Nepali Composition @
- NEPAL 301-302 Advanced Nepali
- PALI 131-132 Elementary Pali
- SINHA 101-102 Elementary Sinhala
- SINHA 160 Intensive Sinhala
- SINHA 201-202 Intermediate Sinhala Reading @
- SINHA 203-204 Intermediate Composition and Conversation @
- TAMIL 101-102 Elementary Tamil
- TAMIL 201-202 Intermediate Tamil Conversation
- TAMIL 203-204 Intermediate Tamil Composition
- CLASS 403-404 Independent Study in Sanskrit Undergraduate
- CLASS 703-704 Independent Study in Sanskrit Graduate

**Southeast Asia—Area Courses**

- ANTHR 322 Magic, Myth, Science, and Religion (also RELST 322) @
- ANTHR 335 People and Cultures of Mainland Southeast Asia @
- ANTHR 424 Anthropology Amongst Disciplines @
- ANTHR 628 Political Anthropology: Indonesia
- ANTHR 634-635 Southeast Asia: Readings in Special Problems
- HIST 244 History of Siam and Thailand
- HIST 396 Southeast Asian History from the Eighteenth Century @
- HIST 695 Early Southeast Asia: Graduate Proseminar
- HIST 696 Modern Southeast Asia: Graduate Proseminar
- HIST 795-796 Seminar in Southeast Asian History

ART H 395 The House and The World: Architecture in Asia

ART H 490 Art and Collecting: East and West

LING 230 Introduction to Southeast Asian Languages and Linguistics @

LING 405-406 Sociolinguistics

LING 600 Field Methods

LING 701-702 Directed Research

MUSIC 245 Gamelan in Indonesian History and Cultures @

MUSIC 445-446 Cornell Gamelan Ensemble

MUSIC 604 Ethnomusicology

**Southeast Asia—Language Courses**

- BURM 103-104 Burmese Conversation Practice
- BURM 121-122 Elementary Burmese
- BURM 123 Continuing Burmese
- BURM 201-202 Intermediate Burmese Reading
- BURM 301-302 Advanced Burmese Reading
- BURM 401-402 Burmese Directed Individual Study
- CEBU 101-102 Elementary Cebuano
- INDO 161-162 FALCON @
- INDO 121-122 Elementary Indonesian
- INDO 123 Continuing Indonesian
- INDO 203-204 Intermediate Composition and Conversation
- INDO 205-206 Intermediate Indonesian @
- INDO 300 Linguistic Structure of Indonesian
- INDO 301-302 Advanced Readings in Indonesian and Malay
- INDO 303-304 Advanced Indonesian Conversation and Composition
- INDO 305-306 Directed Individual Study
- INDO 401-402 Advanced Readings in Indonesian and Malay Literature
- JAVA 131-132 Elementary Javanese
- JAVA 133-134 Continuing Javanese
- JAVA 203-204 Directed Individual Study
- KHMER 101-102 Elementary Khmer
- KHMER 201-202 Intermediate Khmer Reading @
- KHMER 203-204 Intermediate Composition and Conversation @
- KHMER 301-302 Advanced Khmer @
- KHMER 401-402 Directed Individual Study
- KHMER 403-404 Structure of Khmer
- TAG 121-122 Elementary Tagalog
- TAG 123 Continuing Tagalog
- TAG 205-206 Intermediate Tagalog @
- TAG 300 Linguistic Structure of Tagalog
- THAI 101-102 Elementary Thai
- THAI 201-202 Intermediate Thai Reading



- THAI 203-204 Intermediate Composition and Conversation @  
 THAI 301-302 Advanced Thai @  
 THAI 303-304 Thai Literature  
 THAI 401-402 Directed Individual Study  
 VIET 101-102 Elementary Vietnamese  
 VIET 201-202 Intermediate Vietnamese Reading  
 VIET 301-302 Advanced Vietnamese  
 VIET 401-402 Directed Individual Study

## ASTRONOMY

Y. Terzian, chair (512 Space Sciences Building, 255-4935); M. P. Haynes, director of undergraduate studies (530 Space Sciences Building 255-0610); J. F. Bell, J. A. Burns, D. B. Campbell, D. F. Chernoff, J. M. Cordes, M. M. Davis, S. S. Eikenberry, E. F. Flanagan, P. J. Gierasch, R. Giovanelli, P. F. Goldsmith, T. L. Herter, J. R. Houck, D. Lai, P. D. Nicholson, C. J. Salter, S. W. Squyres, G. J. Stacey, S. A. Teukolsky, J. F. Veverka, I. M. Wasserman. Emeritus: T. Gold, T. Hagfors, M. O. Harwit, E. E. Salpeter

Cornell's astronomy faculty, research staff, and graduate students are active in diverse areas of modern astronomy ranging from theoretical astrophysics and general relativity to radio and radar astronomy, infrared and optical astronomy, and the exploration of the solar system. Cornell operates two local optical observatories, the world's largest radio telescope at Arecibo, Puerto Rico, and with two other institutions, the 200-inch optical telescope at Mt. Palomar in California. The department faculty are also Principal Investigators on several major NASA space and planetary exploration missions.

The department offers a number of courses to satisfy a general interest in astronomy. These courses have few or no prerequisites and are not intended for the training of professional astronomers. Among the introductory courses, several choices are available, depending on background and on the requirements to be fulfilled. The 100-level courses are designed primarily for non-science majors. The alternative introductory sequence Astronomy 211-212 is geared toward sophomore physical science and engineering majors and requires coregistration in beginning calculus. Astronomy 201 and 202 are intended for students with an interest in astronomy but no scientific background; they are topical rather than survey-oriented. Astronomy 332 is designed for physical science and engineering majors as an introduction to astrophysics. Other courses at the 200 and 300 levels may appeal to students of various backgrounds and interests, as indicated in the individual course descriptions.

Courses numbered above 400 are intended for students who have had two to three years of college physics and at least two years of college mathematics. Astronomy 440, Independent Study, permits students to engage in individual research projects under the guidance of a faculty member.

Interested students are encouraged to become members of the undergraduate Cornell Astronomy Club. The club has access to the Fuyes Observatory on campus and conducts regular observing and astrophotography

sessions. All students are invited to visit the Space Sciences Building, see the exhibits on display there, and consult a faculty member about career plans or choice of courses.

## The Major

The purpose of the major in astronomy is to provide in-depth knowledge and education about the nature of the universe. Astronomy relies heavily on preparation in physics and mathematics. Consequently, many courses in these fields are included as prerequisites. In preparation for the major, a student would normally elect the introductory physics sequence Physics 112-213-214 or 116-217-218 and the complementary pathway in mathematics, Mathematics 111-122-221-222 or 191-192-293-294 (or equivalent). Students who anticipate undertaking graduate study are urged to elect the honors physics sequence Physics 116-217-218-318-327 if possible. The sophomore seminar Astronomy 233 "Topics in Astronomy and Astrophysics" will provide an introduction to current research in astronomy and astrophysics for prospective majors, but is not required of students who elect to major in astronomy after the sophomore year. Students are also urged to acquire computer literacy. Acceptance to the major will first be considered after completion of three semesters of introductory physics and mathematics and in general will require a GPA of 3.20 in physics and mathematics courses.

The major requirements stress the importance of building a strong preparation in physical science. The following upper level courses are normally required:

- Physics 314 or 318, 316, 323 or 327, 341 and 443  
 Mathematics 421 and 422 (or equivalent, e.g. A&EP 321-2)  
 Astronomy 410, 431, and 432.

Students interested in planetary studies may substitute one or more appropriate advanced courses upon consent of the major adviser or may pursue an independent major under the program in the Science of Earth Systems. In addition, majors are also encouraged to supplement the above courses with any astronomy, physics, or other appropriate courses at or above the 300 level. Advanced seniors can enroll in astronomy graduate courses with the consent of the instructor. Students are also encouraged to work with faculty members on independent study projects under the course Astronomy 440 or to apply to a variety of programs at Cornell, Arecibo, and elsewhere that offer undergraduates summer employment as research assistants. Nearly all undergraduate majors and concentrators become involved in research projects in the upperclass years.

Students whose interest in astronomy is sparked somewhat late in their undergraduate career are encouraged to discuss possible paths with the Director of Undergraduate Studies in Astronomy.

**Honors.** A student may be granted honors in astronomy upon the recommendation of the Astronomy Advisers Committee of the astronomy faculty.

**Double majors.** A double major in astronomy and another subject is possible in many circumstances. However, the set of courses used to fulfill the requirements for each major must be completely independent.

**Concentration.** The concentration in astronomy for other majors normally requires 12 credits, at least 8 of which must be at the 300 level or above. Astronomy 233 is recommended for sophomores planning to concentrate in astronomy.

## Distribution Requirement

All courses in astronomy, except Astronomy 233, may be used to fulfill the science distribution requirement in the Colleges of Arts and Sciences.

## Courses

### ASTRO 101 The Nature of the Universe

Fall. 4 credits. No prerequisites. Labs and discussions limited to 30 students each.

Y. Terzian, J. Bell, labs: P. Gierasch. The history of the universe and the physical nature of existence. An examination of the universe and our place in it and the possible existence of life and intelligence elsewhere in the cosmos. The nature of stars, galaxies, and quasi-stellar sources. The birth, evolution, and death of stars and the formation of the chemical elements, including discussions of supernovae, pulsars, neutron stars, and black holes. The physical state and composition of the interstellar material and its influence on the evolution of our galaxy. An introduction to the special and general theories of relativity. The nature of time. Modern theories of cosmology and the structure and evolution of the universe. The complete lecture notes are made available on the World Wide Web.

### ASTRO 102 Our Solar System

Spring. 4 credits. No prerequisites. Labs and discussions limited to 30 students each. J. Veverka; labs: P. Gierasch.

A survey of the current state and past evolution of our solar system, with emphasis on results from the direct exploration of planets by spacecraft. The course is divided into four parts: theories of formation; the inner planets; the outer solar system; and the search for life in the solar system and elsewhere. Stress is placed on the important processes that have shaped the evolution of planets and satellites.

### ASTRO 103 The Nature of the Universe

Fall. 3 credits. Identical to Astronomy 101 except for omission of the laboratory (see description above).

### ASTRO 104 Our Solar System

Spring. 3 credits. Identical to Astronomy 102 except for omission of the laboratory (see description above).

### ASTRO 105 An Introduction to the Universe

Summer. 3 credits. How do we measure the size of our galaxy and the size of the universe? Is the universe round or flat? How are the stars born, why do they shine, and how do they die? What are the chemical elements, and how were they formed in stars? What are quasars, pulsars, and black holes? How was the solar system formed? What are the environments of other planets like? What is the basic structure of Earth and the other planets? Will we catastrophically alter the earth? Does life exist elsewhere in the universe? How can we find out? Each student has an opportunity to make observations with small telescopes.

**ASTRO 106 Essential Ideas in Relativity and Cosmology**

Summer. 3 credits. Prerequisites: high school algebra and trigonometry. Einstein's theories of special and general relativity, which brought about a fundamental change in our conceptual understanding of space and time, will be studied. Correspondence to, and conflicts with, common sense will be pointed out. Applications to various areas will be studied: in special relativity—space travel, equivalence of mass and energy, nuclear fission and fusion, and thermonuclear processes in the sun; in general relativity—motion of light and particles in curved space-time, cosmological models, and the question of whether the universe is open or closed.

**ASTRO 107 An Introduction to the Universe**

Summer. 4 credits. Identical to Astronomy 105 except for the addition of the afternoon laboratory.

**ASTRO 109 Freshman Writing Seminar: Questions in Astronomy?**

Spring. 3 credits. This class, an introduction to critical, logical thought, will present the basics of the scientific method, how science works in practice, and scientific standards of evidence. We will discuss the evolution of repeatable data into natural law and ideas into accepted theories. Historical illustrations will be drawn from the Copernican Revolution, the Big Bang Theory, and the Search for Extraterrestrial Intelligence. We will also examine pseudosciences such as astrology and ufology, compare them to their scientific counterparts, and demonstrate that they consistently fail to meet rigorous scientific standards. Students will be asked to write logical criticism of items in the news and assigned readings from Carl Sagan's *Demon-Haunted World* and James Burke's "Connections," and design and report on their own small scientific experiments.

**ASTRO 195 Observational Astronomy**

Fall. 3 credits. Limited to 20 students. S. Eikenberry. This course provides a "hands-on" introduction to observational astronomy intended for liberal arts students at the freshman and sophomore level. High school mathematics is assumed, but there are no formal prerequisites. The course objective is to teach how we know what we know about the Universe. The course is set up with 2 lectures and 1 evening laboratory per week. Not all of the evening sessions will be used. Planned exercises include 5 or 6 observational labs (star gazing with binoculars and small telescopes, telescopic observations and CCD imaging of star clusters, nebulae and the planets, solar observations, radio observations of the Milky Way Galaxy), plus a selection of exercises from the following: construction and use of simple instruments such as optical spectrometers, and sun dials; experiments in planetary cratering; collection and study of micrometeorites; computer simulations of planetary orbits and the effects of obliquity on planetary weather; and cosmological explorations using data from the Hubble Space Telescope available on the World Wide Web.

**ASTRO 201 Our Home in the Universe**

Fall. 3 credits. Assumes no scientific background. Course intended for freshmen and sophomores. R. Giovanelli, M. Haynes.

A general discussion of our relation to the physical universe and how our view of the universe has changed from ancient to modern times. Several main themes are covered over the course of semester: (1) our view of the night sky from the ancient Greeks to the Hubble Space Telescope, (2) the death of stars and the formation of black holes, (3) dark matter and the structure of galaxies and (4) the origin, evolution, and fate of the universe. We present a nonmathematical introduction to these subjects and discuss uncertainties and unresolved issues in our understanding.

**ASTRO 202 Our Home in the Solar System**

Spring. 3 credits. Prerequisite: some background in science is required. Course intended for freshmen and sophomores. J. Bell.

This writing course is designed to develop an understanding of our home planet as a member of a diverse and fascinating family of objects in our solar system. Discussion will center on how studies of other planets and satellites have broadened our knowledge and perspective of Earth, and vice versa. We will study, debate, and learn to write critically about important issues of science, ethics, and public policy that have emerged from this new found perspective. Topics to be discussed include global warming, nuclear winter, the impact threat, and the searches for extrasolar planets and extraterrestrial intelligence. Our exploration of these and other topics will be up-to-date, interactive, and quite possibly controversial.

**ASTRO 211 Astronomy: Stars, Galaxies, and Cosmology**

Fall. 4 credits. Intended for engineering and physical sciences freshmen and sophomores. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191. J. Houck. The formation and evolution of normal stars, supernovae, pulsars, quasars, and black holes. The interstellar medium. Cosmology and the structure and evolution of galaxies.

**ASTRO 212 The Solar System: Planets, Satellites, and Rings**

Spring. 4 credits. Intended for first and second year engineering and physical sciences students. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191; some knowledge of classical physics (mechanics and thermodynamics). P. Nicholson.

An introduction to the solar system, with emphasis on the application of simple physical principles. Topics will include the Sun, nucleosynthesis of the elements, radioactive dating, seismology and planetary interiors, greenhouse models of planetary atmospheres, orbital mechanics and resonances, interrelations between meteorites, asteroids and comets, the Jovian planets, icy moons and ring systems, and the search for extra-solar planets.

**ASTRO 233 Topics in Astronomy and Astrophysics**

Fall. 2 credits. Prerequisites: Physics 112 and 213, Mathematics 112 and 221, or permission of instructor. Intended for sophomores planning to major in astronomy or related fields. M. Haynes, D. Lai.

A seminar course on selected topics in astronomy and astrophysics designed for prospective astronomy majors. Content will

vary from year to year, but will include topics from the fields of planetary, galactic, and extragalactic research.

**ASTRO 280 Space Exploration**

Fall. 3 credits. S. Squyres. This course provides an overview of space science, with particular emphasis on the solar system, and a detailed examination of a few selected objects, including the planet Mars, the satellites in the outer solar system, and comets. The focus is on methods of collecting information and especially on spacecraft and space missions. Topics will include the design and limitations of instruments. Ethical and political questions associated with space exploration will be discussed. Intended for students with an interest in science, technology, and associated policy issues. No special background in physical sciences, math, or engineering is assumed.

**ASTRO 290 Relativity and Astrophysics**

Spring. 4 credits. Prerequisites: freshman physics and calculus; knowledge of geometry. I. Wasserman. This course provides a geometrically based introduction to special and general relativity, followed by consideration of astrophysical applications. Included will be discussion of tests of Einstein's theory of space, time, and gravitation; physics of white dwarfs, neutron stars, and black holes; introduction to modern cosmology.

**ASTRO 299 Search For Life in the Universe**

Spring. 4 credits. Prerequisites: two courses in any physical science subject or permission of instructor. J. Cordes, Y. Terzian. The contents of the universe will be surveyed. Theories of cosmic and stellar evolution, and of the formation and evolution of planetary systems, planetary atmospheres and surfaces will be reviewed. Questions regarding the evolution of life and the development of technology will be discussed. Methods to detect extraterrestrial life with emphasis on radio telescopes and associated instrumentation will be presented. Hypothetical communication systems will be developed and discussed.

**ASTRO 331 Climate Dynamics (also SCAS 331)****ASTRO 332 Elements of Astrophysics**

Spring. 4 credits. Prerequisites: calculus and Physics 213. Physics 214 strongly recommended. R. Giovanelli, D. Lai. An introduction to astronomy, with emphasis on the application of physics to the study of the universe. Physical laws of radiation. Distance, size, mass, and age of stars, galaxies, and the universe; stellar evolution and nucleosynthesis. Supernovae, pulsars, and black holes. Galaxies and quasars. Introduction to cosmology. The structure and evolution of planets and of the solar system. Mainly intended for students of science, engineering and science education, interested in astronomy and astrophysics.

**ASTRO 410 Experimental Astronomy**

Fall. 4 credits. Prerequisites: Physics 214/8 (or 310 or 360), Physics 323/7 (or co-registers) or permission of instructor. J. Cordes, P. Goldsmith, J. Houck. Observational astrophysics. Major experiments will involve techniques in CCD (charge-coupled-device) imaging, optical photometry, optical spectroscopy, radiometry, radio

spectroscopy and radio astronomy. The experiments involve use of the Hartung-Boothroyd Observatory's 24-inch telescope, a laboratory 2-element radio interferometer, and a radio telescope mounted on top of the Space Sciences Building. The laboratory covers the fundamentals of using astronomical instrumentation and data analysis as applied to celestial phenomena: asteroids, normal stars, supernova remnants, globular clusters, planetary nebulae, the interstellar medium, OH masers, and galaxies.

#### **ASTRO 431 Introduction to Astrophysics and Space Sciences I**

Fall. 4 credits. Prerequisites: mathematics above the 200 level and physics above the 300 level; co-registration in Physics 341 and 443 is recommended. D. Lai.

A systematic development of modern astrophysical concepts for physical science majors. Stellar structure and evolution, stellar atmospheres, compact objects (white dwarf, neutron star and black hole), planets and brown dwarfs. Current research problems in these areas will be introduced along the way. The emphasis will be on using fundamental physics principles to explain astronomical phenomena. A variety of physics, including elements of general relativity, nuclear physics, solid state physics and fluid mechanics, will be introduced or reviewed in a quick, practical fashion and put into use in solving astrophysics puzzles. At the level of *Astrophysical Concepts* by Harwit.

#### **ASTRO 432 Introduction to Astrophysics and Space Sciences II**

Spring. 4 credits. Prerequisite: Astronomy 431 or permission of instructor. D. Chernoff.

This course is divided into two broad topics; the astrophysics of the interstellar medium and cosmology. The interstellar medium section will cover thermal equilibrium and radiative transport in HII regions, atomic gas regions, and molecular clouds. The cosmology section will include expansion of the universe, metrics, Friedmann equations, dark matter, cosmological tests, the early universe, and the cosmological production of the elements.

#### **[ASTRO 434 The Evolution of Planets**

Spring. 4 credits. Not offered 1998-99.

An introduction to the physical and chemical processes that have been active in altering the environments of planets and satellites from their original to their present state. Theories of the formation of the solar system are revealed with special emphasis on chemical differentiation of the primeval solar nebula. A critical assessment is made of how well the various theories account for the clues left in the meteorite record and how well they explain the current environments of the planets and satellites. The main ideas about the formation and evolution of terrestrial planets, satellite systems, and asteroids are considered in detail. Some specific topics included are the history of the earth-moon system, the probable evolution of Jupiter's Galilean satellites, and the comparative histories of Venus, Earth, and Mars.]

#### **ASTRO 440 Independent Study in Astronomy**

Fall or spring. 2-4 credits. Prerequisite: permission of instructor. Recommended: familiarity with the topics covered in Astronomy 332, 431, or 434.

Individuals work on selected topics. A program of study is devised by the student and instructor. Students need to fill out an independent study form, have it signed by the instructor, and register in the department office, 510 Space Sciences Building.

#### **ASTRO 485 Atmospheric and Ionospheric Physics (also ELE E 485)**

Fall. 3 credits. Prerequisites: Physics through 214 or equivalent, introductory chemistry, introductory differential equations. P. Gierasch, D. Farley.

The structure and dynamics of the middle atmosphere and the ionosphere are surveyed. Topics include energy balance and thermal structure, global circulation patterns, waves that carry energy from the lower atmosphere to the upper atmosphere, ionization, production and loss of charged particles, coupling of the neutral atmosphere with electric fields, charged particle transports. Observation techniques, including radar and in situ instruments, will be discussed. Comparisons with other planets will be made.

#### **[ASTRO 490 Senior Seminar Critical Thinking**

Spring. 3 credits. Not offered 1998-99.

Critical thinking in scientific and nonscientific contexts. Topics will include elements of classical logic and rhetoric, including standards of evidence. Case studies will include examples of competing hypotheses in the history of science, as well as examples from borderline science and medicine, religion, and politics. Stress will be laid on creative generation of alternative hypotheses and their winnowing by critical scrutiny. Topics will include the nature and history of the universe, the nature of reality, the possibilities of life on other planets, and artificial intelligence.]

#### **ASTRO 509 General Relativity**

Fall. 4 credits. E. Flanagan.

For description, see PHYS 553.

#### **ASTRO 510 Applications of General Relativity**

Spring. 4 credits. E. Flanagan.

For description, see PHYS 554.

#### **[ASTRO 511 Physics of Black Holes, White Dwarfs, and Neutron Stars (also Physics 525)**

Spring. 4 credits. Not offered 1998-99.

The formation of compact objects; neutrino and gravitational radiation from supernova collapse and neutron stars. Equilibrium configurations, equations of state, stability criteria and mass limits: the influence of rotation and magnetic fields. Pulsar phenomena. Mass flow in binary systems; spherical and disk accretion; high-temperature radiation processes. Compact X-ray sources and X-ray bursts. Emphasis will be on the application of fundamental physical principles to compact objects. No astronomy or general relativity prerequisites. Text: *Physics of Black Holes, White Dwarfs, and Neutron Stars*, by Shapiro and Teukolsky.]

#### **ASTRO 516 Galactic Structure and Stellar Dynamics**

Fall. 4 credits. D. Chernoff.

This course is an introduction to the study of the structure of galaxies via the laws of modern physics. Topics include the observed kinematics and spatial distribution of stars in the vicinity of the Sun, shapes and properties of stellar orbits, the gravitational N-body problem, collisional relaxation in stellar

systems, spiral structure, galaxy classification and evolution, and cosmological results in galaxy formation.

#### **[ASTRO 520 Radio Astronomy**

Fall. 4 credits. Not offered 1998-99.

Radio astronomy telescopes and electronics; antenna theory; observing procedures and data analysis; concepts of interferometry and aperture synthesis.]

#### **ASTRO 523 Signal Modeling, Statistical Inference, and Data Mining in Astronomy**

Spring. 4 credits. J. Cordes.

The course aims to provide tools for modeling and detection of various kinds of signals encountered in the physical sciences and engineering. Data mining and statistical inference from large and diverse databases will also be covered. Experimental design is to be discussed. Basic topics covered include: probability theory; Fourier analysis of continuous and discrete signals; digital filtering; matched filtering and pattern recognition; spectral analysis; Karhunen-Loeve analysis; wavelets; parameter estimation; optimization techniques; Bayesian statistical inference; deterministic, chaotic, and stochastic processes; image formation and analysis; maximum entropy techniques. Specific applications will be chosen from current areas of interest in astronomy, where large-scale surveys throughout the electromagnetic spectrum and using non-electromagnetic signals (e.g., neutrinos and gravitational waves) are ongoing and anticipated. Applications will also be chosen from topics in geophysics, plasma physics, electronics, artificial intelligence, expert systems, and genetic programming. The course will be self-contained and is intended for students with thorough backgrounds in the physical sciences or engineering.

#### **[ASTRO 525 Techniques of Optical/Infrared and Submillimeter Astronomy**

Spring. 4 credits. Not offered 1998-99.

Optical/infrared and submillimeter telescopes and instrumentation will be discussed and related to current research in these fields. Special emphasis will be on detector elements, instrument design and construction, data analysis and observing procedures. Intended for students with a thorough understanding of undergraduate physics.]

#### **[ASTRO 530 Astrophysical Processes**

Spring. 4 credits. Not offered 1998-99.

Thermal and nonthermal radiation processes encountered in studies of stars, the interstellar and intergalactic media, galaxies and quasars. Fundamentals of radiative transfer, bremsstrahlung, synchrotron radiation, and Compton scattering will be covered, as well as spectral line transfer, gas heating and cooling, and topics in atomic and molecular spectroscopy. These topics will be discussed within the framework of astrophysical situations, such as star formation, interstellar gas and dust clouds, jets, active galactic nuclei, clusters of galaxies and cosmology.]

#### **[ASTRO 555 Theory of the Interstellar Medium**

Spring. 4 credits. Not offered 1998-99.

Global theories of the interstellar medium-mass and energy exchange between the different phases. The role of shock waves and energetic outflows in the thermal equilibrium and ionization state of gas in the galaxy. Basic astrophysical fluids and plasmas.

Galactic dynamics. Observations techniques, current problems and results.]

**ASTRO 560 Theory of Stellar Structure and Evolution (also Physics 667)**

Fall. 4 credits. I. Wasserman.

Observational overview; hydrostatic equilibrium; equations of state; radiative and convective energy transport; nuclear burning; solar neutrinos; rotation and magnetic fields; stellar seismology; brown dwarfs; pre-main sequence contraction.

**[ASTRO 570 Physics of the Planets]**

Fall. 4 credits. Not offered 1998-99.

An introductory survey of planetary science with an emphasis on the application of physical principles. Planetary dynamics, including satellite orbits, tidal interactions, resonances, and ring dynamics. An introduction to the theory of planetary interiors, gravitational fields, heat sources, and rotational mechanics. Physics and chemistry of planetary atmospheres, including radiative transfer, convection, and thermal structure. Important observational results, including those of ground-based optical, infrared, radio, and radar astronomy, as well as those made by spacecraft, will also be discussed. Intended for students in astronomy, physics, and engineering.]

**[ASTRO 571 Mechanics of the Solar System (also Theoretical and Applied Mechanics 673)]**

Spring. 3 credits. Not offered 1998-99.

Gravitational potential, planetary gravity fields. Free and forced rotations. Chandler wobble, polar wander, damping of nutation. Equilibrium tidal theory, tidal heating. Orbital evolution of natural satellites, resonances, spin-orbit coupling. Cassini states. Long-term variations in planetary orbits. Orbital and Rotational Chaos. Dust dynamics. Dynamics of ring systems. Seismic waves, free oscillations. Illustrative examples are drawn from contemporary research.]

**ASTRO 579 Celestial Mechanics**

Fall. 3 credits. J. Burns.

For description, See T&AM 672.

**ASTRO 590 Galaxies and the Universe**

Spring. 4 credits. R. Giovanelli, M. Haynes.

The universe, its constituents, its large-scale structure, and its history in the light of the major thrusts of extragalactic research. The morphology, photometry, dynamics, and kinematics of galaxies and their subsystems. Determination of masses, mass-to-light ratios, and the "missing mass." Activity in Seyferts, radio galaxies, and quasars. Binaries, groups, clusters and superclusters. The extragalactic distance scale. Galaxy formation and evolution. Confrontation of cosmological theories with observational results.

**[ASTRO 599 Cosmology (also Physics 599)]**

Fall. 4 credits. Prerequisites: statistical physics, quantum mechanics and electromagnetic theory. Not offered 1998-99. I. Wasserman.

This course is intended to provide a detailed theoretical development of current ideas in cosmology. Topics will include observational overview; growth of irregularities, galaxy formation and clustering; big bang cosmology, recombination, nucleosynthesis; very early universe, symmetry breaking, inflationary scenarios. At the level of Peebles, *Principle of Physical Cosmology*.]

**[ASTRO 620 Seminar: Advanced Radio Astronomy]**

Spring. 2 credits. Prerequisites: some background in extragalactic astronomy and/or radio astronomy suggested. Open to advanced undergraduates by permission of instructor. Not offered 1998-99.

Selected topics in observational cosmology at radio wavelengths including: redshift surveys, gas stripping mechanisms, rotation curves and the distributions of mass and light, large scale structure, peculiar motions, atomic and molecular studies at high redshift, the Sunyaev-Zel'dovich effect, evolution of radio luminosity function, and the cosmic microwave background.]

**ASTRO 621 Seminar: Planetary Radar Astronomy**

Spring. 3 credits. Prerequisites: intended for graduate students and upper-level undergraduates in astronomy, engineering, and geology. A good background in undergraduate mathematics and physics is required. D. Campbell.

The application of radar to the study of the surfaces of planets, planetary satellites, asteroids, and comets. Topics covered will be target detectability and the specification of the needed antennas, transmitters, and receiving systems; data processing techniques; imaging techniques including delay-Doppler imaging, synthetic aperture radar (SAR) and interferometric SAR; target characterization from cross section, scattering laws and polarization measurements; results from earth-based and spacecraft radar observations of Mercury, Earth, the Moon, Mars, the satellites of Jupiter, the rings of Saturn, asteroids, and comets.

**ASTRO 640 Advanced Study and Research**

Fall or spring. Credit to be arranged.

Guided reading and seminars on topics not currently covered in regular courses. Students need to register in the department office, 510 Space Sciences Building.

**ASTRO 652 Advanced Atmospheric Dynamics (also SCAS 652)**

Spring. 3 credits. Offered alternate years.

For description, see SCAS 652.

**[ASTRO 660 Cosmic Electrodynamics (also Applied and Engineering Physics 608)]**

Spring. 2 credits. Not offered 1998-99.]

**ASTRO 671 Seminar: Planetary Science**

Fall. 3 credits. J. Veverka, S. Squyres.

An informal series of lectures discussing the techniques used to obtain and interpret spacecraft and earth-based remote sensing data to the planets and smaller bodies in the solar system. Intended for graduate students and seniors. The emphasis this year will be on the exploration of Mars, with a particular focus on the new results from Pathfinder and Mars Global Surveyor.

**[ASTRO 673 Seminar: Planetary Atmospheres]**

Spring. 2 credits. Not offered 1998-99.

This course will deal with motions in planetary atmospheres. Among the topics to be discussed are the Venus general circulation, dust and water transports on Mars, alternating jets on the outer planets, and compositional layering in the outer planets.]

**[ASTRO 690 Seminar: Computational Astrophysics (also Physics 680)]**

Spring. 3 credits. Prerequisites: working knowledge of FORTRAN. Not offered 1998-99. S. Teukolsky.

A course designed to familiarize graduate students with numerical techniques for solving diverse problems in astrophysics. Numerical methods discussed in the course will include solving ordinary and partial differential equations, linear algebra and eigenvalue problems, Monte Carlo techniques, fast Fourier transforms, etc. In contrast to traditional numerical analysis courses, the flavor of the course will be "how-to", rather than theoretical. No theorems will be proved. Students will be allotted computer time to solve, both individually and in small teams, assigned numerical exercises. Text: *Numerical Recipes* by Press, Teukolsky, Vetterling, and Flannery.]

**[ASTRO 699 Seminar: Problems in Theoretical Astrophysics (also Physics 665)]**

Fall. 2 credits. Not offered 1998-99.

An informal seminar that will examine "New Directions in Astrophysics." The participants will discuss neutrino astronomy, LIGO (the gravitational wave observatory), high energy gamma rays and cosmic rays, laboratory searches for dark matter, and the future of optical, radio, and infrared astronomy, both on the ground and in space. The seminar is open to all graduate students.]

**ASTRO 699 Seminar: Theoretical Astrophysics (also Physics 665)**

Spring. 2 credits. P. Goldsmith.

A seminar for graduate students that will address the issues of molecular clouds in the Milky Way and infrared and radio-wavelength observations of gas and dust in these regions. We will emphasize information about physical conditions in dense clouds that allows us to understand how star formation occurs in these regions, and how this process in turn affects molecular clouds and their subsequent evolution. We will touch on topics of astrochemistry, collisional and radiative molecular processes, gas-grain interactions, and a number of topics related to observations of the magnetic field in dense clouds and its effects.

## BIOLOGICAL SCIENCES

C. Walcott, director (169 Biotechnology Building, 255-5042); J. J. Doyle, associate director and director of undergraduate studies (200 Stimson Hall, 255-5233); B. E. Comella, biology center coordinator (Biology Center, 216 Stimson Hall, 255-3358); B. S. Stewart, registrar (200 Stimson Hall, 255-6859)

Biology is a popular subject at many universities for a variety of reasons: it is a science that is in an exciting phase of development; it prepares students for careers in challenging and appealing fields such as human and veterinary medicine, environmental sciences, and biotechnology; and it deals with the inherently interesting questions that arise when we try to understand ourselves and the living world around us. Many of the decisions we face today deal with the opportunities and problems that biology has put before us.

The major in biological sciences at Cornell is offered by the Division of Biological Sciences



to students enrolled in either the College of Agriculture and Life Sciences or the College of Arts and Sciences. Student services in the division's Office for Academic Affairs and the Behrman Biology Center are available to students from either college.

The biology major is designed to enable students to acquire the foundations in physical and life sciences necessary to understand modern biology and to pursue advanced studies in a specific area of biology. Programs of study include animal physiology; biochemistry; cell biology; ecology and evolutionary biology; general biology; genetics and development; microbiology; neurobiology and behavior; and plant biology. A special program of study is available for qualified students with an interest in nutrition. Students interested in the marine sciences may consult the Cornell Marine Programs Office (G14 Stimson Hall, 255-3717) for academic advice and career counseling. For more details about the biology curriculum see the section in this catalog on the Division of Biological Sciences.

## BIOLOGY AND SOCIETY MAJOR

See under Special Programs and Interdisciplinary Studies.

## BURMESE

See Language Courses under Languages and Linguistics.

## CAMBODIAN

See Language Courses under Languages and Linguistics.

## CEBUANO (BISAYAN)

See Language Courses under Languages and Linguistics.

## CHEMISTRY AND CHEMICAL BIOLOGY

P. L. Houston, chair (122 Baker Laboratory, 255-4174); J. E. McMurry, director of undergraduate studies; H. D. Abruña, A. C. Albrecht, B. A. Baird, T. P. Begley, J. M. Burlitch, B. K. Carpenter, J. C. Clardy, G. W. Coates, D. B. Collum, H. F. Davis, F. J. DiSalvo, G. S. Ezra, R. C. Fay, J. M. J. Fréchet, J. H. Freed, B. Ganem, M. A. Hines, R. Hoffmann, S. Lee, R. Loring, J. E. McMurry, J. Meinwald, S. O. Russo, D. Sogah, D. A. Usher, B. Widom, C. F. Wilcox, P. T. Wolczanski, D. B. Zax

S. T. Marcus, associate director of undergraduate studies

The chemistry department offers a full range of courses in physical, organic, inorganic, analytical, theoretical, bioorganic, and biophysical chemistry. In addition to their teaching interests, chemistry faculty members have active research programs. The link between teaching and research is a vital one in a continuously evolving scientific subject; it

ensures that students will be provided with the most advanced information and perspectives, and affords opportunities for students to participate in research.

### The Standard Major

The chemistry major at Cornell provides a great deal of flexibility and prepares students for a large variety of career options. In recent years, chemistry majors have gone on to graduate study in chemistry, medicine, law, and business management, as well as directly into positions with chemical, pharmaceutical, and other industrial companies. A major in chemistry can also provide the basis for work in related areas such as molecular biology, chemical physics, geochemistry, chemical engineering, materials science, solid state physics, and secondary education. The required courses for the major can be completed in three years, leaving the senior year open for advanced and independent work under the supervision of a professor.

The courses are arranged as a progression, with some (including mathematics and physics) prerequisite to those that are more advanced. During the first year, a student should normally register for general chemistry (preferably Chemistry 215-216 although Chemistry 207-208 or 206-208 is acceptable), mathematics, a freshman writing seminar, a foreign language if necessary, or physics. Chemistry 215-216 is aimed at those students with good preparation and a strong interest in chemistry. Students who do not know if their preparation is adequate should consult the instructor. In the second year a student should complete calculus and take physics and organic chemistry (Chemistry 359-360 is preferred to Chemistry 357-358). The second-year laboratory courses include 300, Quantitative Chemistry and 301, Experimental Chemistry I. Chemistry 389-390, Physical Chemistry I and II, and Chemistry 302-303, Experimental Chemistry II and III, should be completed in the third year. Chemistry 410 should be completed in the third or fourth year. Advanced work in chemistry and related subjects can be pursued in the fourth year and in the earlier years as well. The opportunity for independent research is also available. All students with questions about the major are encouraged to consult the chair of the Department of Chemistry or the chair's representative. Entering students who are exceptionally well prepared in chemistry may receive advanced placement credit for Chemistry 207.

Prerequisites for admission to a major in chemistry are (1) Chemistry 215-216; 300 or 207-208; 300; or 211-208, 300; or 206, 208, 300; (2) Physics 207 or 112; and (3) Mathematics 111 or 191. Students are not encouraged to undertake a major in chemistry unless they have passed those prerequisite courses at a good level of proficiency. The minimum additional courses that must be completed for the standard major in chemistry are listed below.

- 1) Chemistry 301-302-303, 359-360 (357-358 may be substituted), 389-390, and 410
- 2) Mathematics 112, 213; or 122, 221-222; or 192-293-294
- 3) Physics 208

Potential majors electing to take Mathematics 213 are strongly urged to do so in their sophomore year to avoid scheduling conflicts

with Chemistry 389 in their junior year.

The sequence described above is a basic program in chemistry that students can extend substantially in whatever direction suits their own needs and interests. Those going on to do graduate work in chemistry should recognize that these requirements are minimal and should supplement their programs, where possible, with further courses such as Chemistry 405, 605, 606, 666, 668, and 681. Even students not planning graduate work in chemistry should consider advanced work in physics and mathematics, courses in the biological sciences, and advanced work in chemistry as possible extensions of the basic program.

**Honors.** The honors program in chemistry offers superior students in the standard major an opportunity to study independently in seminars and to gain additional experience by engaging in research during the senior year. It is particularly recommended to those who plan graduate work in chemistry. Prospective candidates should complete the introductory organic chemistry and physical chemistry sequences by the end of the junior year, although failure to have completed those courses in the junior year does not in itself disqualify a student from the honors program. Completion of the program at a high level of performance leads to the degree of Bachelor of Arts with honors in chemistry. Students will be admitted to the program by invitation of the department, with selection based on a superior cumulative average, including chemistry grades, and good performance in a prior research program.

Prospective candidates should discuss their plans with advisers by March 1 of their junior year; participants are notified by early January of their senior year. To be awarded honors, candidates must show outstanding performance in at least 8 credits of undergraduate research such as is offered in Chemistry 421, 433, 461, or 477. In addition, the writing of a thesis in the honors seminar (Chemistry 498) is expected.

### The Alternative Major

The alternative major is a flexible program that provides core coverage of chemistry around which students can design a program to meet their own career goals. Requirements consist of a core program along with four additional courses chosen by the student. One of the four must be in chemistry at the 300 level or above; the other three may be in another field but should represent a cohesive plan and must be approved by a departmental committee. Students who select the alternative major are not eligible for the Honors Program.

#### The Core Program for the Alternative Major

- 1) Chemistry 215-216, 300 (or 207-208, 300; or 211, 208, 300; or 206, 208, 300); 251, 257, 287, 289, and 410 (Chem 357-358 or 359-360 can be substituted for Chem 257, or Chem 389-390 can be substituted for Chem 287, thereby fulfilling the requirement for an additional 300-level chemistry course)
- 2) Mathematics 111-112; or 111, 122; or 191-192
- 3) Physics 207-208; or 112, 213

### Additional Courses for the Alternative Major

Possible plans for the remaining three courses might include programs in Biochemistry; Biology; Physics; Computer Science; Polymers; Materials Science; Science, Technology, and Society; History and Philosophy of Science and Technology; Business and Management; Economics; Education; and others.

Premedical students and those interested in pursuing double majors might find the alternative major particularly attractive. The course requirements for admission to the alternative major are the same as those for the standard major.

### Program for Science Teachers

Chemistry majors who wish to become teachers will be interested to know that Cornell University offers a certification program for teachers of secondary (grades 7-12) science. Interested students apply to the program during their sophomore or junior years. If accepted, students integrate some course work in Education with the rest of their undergraduate studies. All chemistry majors who enter this program will remain in the College of Arts and Sciences to complete the major.

After earning the bachelor's degree, certification students enter the Graduate Field of Education to complete a fifth year of study at Cornell. Following this fifth year, students are eligible for a master's degree from Cornell and a teaching certificate from New York State. Additional information is available from Susie Slack, 424 Kennedy Hall, 255-9255 or Prof. Deborah Trumbull, 426 Kennedy Hall, 255-3108.

### Laboratory Course Regulations

Students registered for laboratory courses who do not appear at the first meeting of the laboratory will forfeit their registration in that course.

Students and members of the teaching staff are required to wear safety goggles and lab aprons in all chemistry laboratories. Close-toed footwear is required (no sandals). Students are reminded to take their goggles and lab aprons to the first laboratory session. Those who fail to cooperate with the safety program will be asked to leave the laboratories.

Students are required to pay for glassware and any other items broken or missing from their laboratory desks at the close of each semester. Students who fail to inventory their desks at the appointed time in the presence of their instructor are charged a \$10 fee in addition to charges for any breakage.

### Courses

Note: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.

Preliminary examinations for all courses may be given in the evening.

### [CHEM 105 The Language of Chemistry

Fall. 3 credits. This course contributes to meeting the College of Arts and Sciences "Physical and Biological Sciences" (Group I) distribution requirement, as well as satisfying the C.A.L.S. physical science requirement of one course in chemistry. S-U or letter grades. Lects, M W F 12:20. Prelims: 12:20 p.m. Not offered 1998-99. J. Meinwald.

In his autobiography, A. Kornberg (Nobel Laureate in Medicine, 1959) wrote, "much of life can be understood in rational terms if expressed in the language of chemistry. It is an international language, a language for all time, a language that explains where we came from, what we are, and where the physical world will allow us to go." Through careful examination of a few milestone investigations of naturally occurring biologically important compounds (such as the antimalarial quinine, bombykol, and the sperm attractants of algae), the principles of chemistry to which Kornberg refers will be developed. Methods of analyzing chemical problems will be emphasized, rather than the memorization of specific results or formulas. There will be an opportunity for students, working in small groups, to prepare and present short reports on topics of particular current interest at the interface between chemistry and biology.]

### CHEM 106 Strategies in Science: The World of Chemistry

Spring. 3 credits. This course contributes to meeting the College of Arts and Sciences "Physical and Biological Sciences" distribution requirement (Group I) as well as satisfying the C.A.L.S. physical science requirement of one course in chemistry. S-U or letter grades. Lects, M W F 1:25. Prelims: 7:30-9 p.m., March 2, April 6. D. A. Usher.

A general appreciation of chemistry in the everyday world which will highlight for nonscientists the way the scientific method works. Using several case studies, the course will focus not only on what modern chemistry has accomplished, but more generally on the way scientists think and how they function. Selected topics include (a) the chemistry of food, food additives, and the effect of diet on health; (b) drugs and medicines; (c) air and water pollution, pesticides, herbicides, acid rain, and other environmental chemistry; (d) the chemistry of plastics, polymers, and other modern materials; (e) the chemistry of taste and smell, including flavors, perfumes, and cosmetics; and (f) biotechnology and genetic chemistry. Other topics to be discussed are the influence of the media on scientific issues, the decision-making process in science, scientific publishing, and fraud in science.

### CHEM 206 Introduction to General Chemistry

Fall or summer. 4 credits. Enrollment limited. Recommended for students who have not had high school chemistry and for those needing a less intensive course than Chemistry 207. Lects, M W F 11:15; lab, T R or F 8:00-11:00, or M W or F 1:25-4:25. Prelims: 7:30-9 p.m., Oct. 6, Nov. 12. D. Y. Sogah.

An introduction to general chemistry, with emphasis on important principles and facts. Chemistry 206 covers much of the same material as Chemistry 207 plus chemical equilibrium and introduction to chemical kinetics, but does so at a slower pace.

### CHEM 207-208 General Chemistry

207, fall or summer; 208, spring or summer. 4 credits each term. Enrollment limited. Recommended for those students who will take further courses in chemistry. Prerequisite for Chemistry 207: high school chemistry. Prerequisite for Chemistry 208: Chemistry 206 or 207. Lects: T R 10:10 or 12:20. Lab: T R F 8-12 or M T W R F 12:20-4:25. Prelims: 7:30-9 p.m., Oct. 6, Nov. 12, March 2, April 15. Fall: J. E. McMurtry; spring: R. C. Fay.

The fundamental chemical principles and descriptive facts are covered, with considerable attention given to the quantitative aspects and to the techniques important for further work in chemistry. Second-term laboratory includes a systematic study of qualitative analysis.

Note: Entering students exceptionally well prepared in chemistry may receive advanced placement credit for General Chemistry 207 by demonstrating competence in the advanced placement examination of the College Entrance Examination Board or in the departmental examination given at Cornell before classes start in the fall.

### CHEM 211 Chemistry for the Applied Sciences

Fall or spring. 4 credits. Recommended for those students who intend to take only one term of chemistry. Enrollment limited. Prerequisite: high school chemistry or permission of instructor. Corequisite: a calculus course at the level of Mathematics 111 or 191. Lects: M W F 12:20. Lab: fall and spring, M T W R F 1:25-4:25. Prelims: 7:30-9 p.m., Sept. 24, Oct. 22, Nov. 19, Feb. 18, March 16, April 20. Fall: F. J. DiSalvo; spring: D. B. Zax.

Important chemical principles and facts are covered with the objective of understanding the role of chemistry in other fields. Emphasis is on topics such as solid-state materials, periodic trends, and specific classes of compounds, such as polymers.

Note: Entering students exceptionally well prepared in chemistry may receive advanced placement credit for General Chemistry by demonstrating competence in the advanced placement examination of the College Entrance Examination Board or in the departmental examination given at Cornell before classes start in the fall.

### CHEM 215-216 General and Inorganic Chemistry

215, fall; 216, spring. 4 credits each term. Recommended for students who intend to specialize in chemistry or in related fields. Enrollment limited. Prerequisites: good performance in high school chemistry and physics and in mathematics SAT. Corequisite: a calculus course at the level of Mathematics 111 or 191 for students who have not taken high school calculus. Prerequisite for Chemistry 216: Chemistry 215. Lects: M W F 12:20; lab, M T W R or F 1:25-4:25. Prelims: 7:30-9 p.m., Oct. 6, Nov. 12, Feb. 18, March 16, April 20. Fall: R. Hoffmann; spring: S. Lee.

An intensive systematic study of the laws and concepts of chemistry, with considerable emphasis on quantitative aspects. Second term includes systematics of inorganic chemistry. Laboratory work covers qualitative analysis, transaction metal chemistry, and spectroscopic techniques.

**[CHEM 222 Molecular Messengers in Nature]**

Spring. 3 credits. Prerequisite: one year of high school chemistry, Chemistry 206 or 207, or permission of instructor. Not offered 1998-99.

Organisms communicate with one another in nature chiefly by means of chemical signals. We will examine this intriguing mode of communication as it applies to a wide variety of species ranging from bacteria to insects and mammals, including humans. Essential concepts of organic chemistry and biology will be introduced and illustrated. Each student will be expected to prepare a term paper, and there will be an opportunity for oral presentation of some of these papers for class discussion.]

**CHEM 251 Introduction to Experimental Organic Chemistry**

Fall, spring, or summer. 2 credits. Recommended for non-chemistry majors. Enrollment limited. Prerequisites: coregistration in Chemistry 257 or 357. Lec: fall, R 11:15 or F 8:00; spring, F 8; lab, M T W R or F 1:25-4:25, or T or R 8-11. Prelims: 7:30-9 p.m., Fall: Nov. 5. Spring: April 13. Fall: S. Russo; spring: S. Russo.

Introduction to the synthesis, separation, and handling of materials, including applications of many types of chromatography, simple and fractional distillation, crystallization, extraction, and others.

**CHEM 252 Elementary Experimental Organic Chemistry**

Spring. 2 credits. Recommended for non-chemistry majors. Prerequisite: Chemistry 251. Lec, R 11:15; lab, M T W R or F 1:25-4:25, or T or R 8-11. Prelims: 7:30-9 p.m. April 13. S. Russo.

A continuation of Chemistry 251.

**CHEM 257 Introduction to Organic and Biological Chemistry**

Spring. 3 credits. Prerequisite: Chemistry 206 or 207. Because Chemistry 257 is only a three-credit course, it does not provide a practical route to satisfying medical school requirements. Lec, M W F 11:15. Prelims: 7:30-9:00 p.m., March 4, April 15. J. E. McMurry.

An introduction to organic chemistry with an emphasis on those structures and reactions of organic compounds having particular relevance to biological chemistry.

**CHEM 287-288 Introductory Physical Chemistry**

287, fall; 288, spring. 3 credits each term. Prerequisites: Chemistry 208 or 216 and Mathematics 111-112 and Physics 208, or permission of instructor. Prerequisite for Chemistry 288: Chemistry 287 or 389. Lec, M W F 9:05; 287: rec, M or W 1:25, T 9:05; 288: rec, M or W 1:25. Prelims: 7:30-9 p.m., 287: Oct. 1, Nov. 5, Dec. 1. 288: March 11, April 22. Fall:

H. D. Abruna; spring: A. C. Albrecht.

A systematic treatment of the fundamental principles of physical chemistry, focusing in the fall on thermodynamics and the quantum mechanics of the periodic table and chemical bonding. In the spring the course will be oriented to the application of physical chemistry to biological systems, including transport, kinetics, electrochemistry, spectroscopy. Chemistry 287 satisfies the minimum requirement for physical chemistry in the alternative chemistry major.

**CHEM 289-290 Introductory Physical Chemistry Laboratory**

289, fall; 290, spring. 2 credits each term. Lec: fall, R 8:00 a.m.; spring, R 8:00 or 9:05. Lab: fall, M T 1:25-4:25; spring, M T W R 1:25-4:25. Fall: T. McCarrick; spring: T. McCarrick.

Quantitative and qualitative methods basic to the experimental study of physical chemistry.

**CHEM 300 Quantitative Chemistry**

Fall. 2 credits. Prerequisite: Chemistry 208, or Chemistry 216 or advanced placement in chemistry. Lec, R 10:10; lab, M T W R F 12:20-4:25 or T 8-12. Prelim: 7:30-9 p.m., Oct. 22, Nov. 17. J. M. Burlitch.

Volumetric, spectrophotometric, and potentiometric methods are emphasized. Techniques are learned by analysis of knowns, and then are used on unknowns. Lectures and problem sets stress the relationship between theory and applications.

**CHEM 301 Experimental Chemistry I**

Spring. 4 credits. Prerequisites: Chemistry 300, and 357 or 359. Lec, M W F 8:00; 2 labs, M W 1:25-4:25 or T R 8-11 or T R 1:25-4:25. G. W. Coates.

An introduction to the techniques of synthetic organic chemistry. A representative selection of the most important classes of organic reactions will be explored in the laboratory. The theoretical basis for these reactions and for the separation techniques used will be discussed in the lectures.

**CHEM 302 Experimental Chemistry II**

Fall. 4 credits. Enrollment limited; preference given to chemistry majors. Prerequisite: Chemistry 301. Lec, M W F 9:05; 2 labs, M W 1:25-4:25, T R 8-11 or T R 1:25-4:25. TBA.

Instrumental methods of analysis, including UV, IR and AA spectroscopies and gas chromatography. The design of experiments is stressed.

**CHEM 303 Experimental Chemistry III**

Spring. 4 credits. Each lab limited to 11 students. Prerequisites: Chemistry 302, 389, 390; coregistration in the latter is permissible. Lec, M W F 9:05; 2 labs, M W 1:25-4:25, or T R 9:00-12 or T R 1:25-4:25. H. D. Abruna.

An introduction to experimental physical chemistry, including topics in calorimetry, spectroscopy and kinetics. The analysis and numerical simulation of experimental data is stressed.

**CHEM 357-358 Organic Chemistry for the Life Sciences**

357, fall or summer; 358, spring or summer. 3 credits each term. Prerequisite for Chemistry 357: Chemistry 208 or 216 or advanced placement; recommended: concurrent registration in Chemistry 251 or 300. Prerequisite for Chemistry 358: Chemistry 357 or permission of the instructor. Lec, M W F 9:05 or 10:10, optional rec may be offered. Prelims: 7:30-9 p.m., Sept. 24, Oct. 20, Nov. 17, Feb. 18, March 16, April 20. Fall: B. K. Carpenter; spring: J. C. Clardy.

A study of the more important classes of carbon compounds—especially those encountered in the biological sciences. Emphasis will be placed on their three-dimensional structures, mechanisms of their characteristic reactions, their synthesis in nature and the laboratory, methods of

identifying them, and their role in modern science and technology.

*Note:* Because of duplication of material, students who take both Chemistry 257 and 357 will receive graduation credit only for Chemistry 257.

**CHEM 359-360 Organic Chemistry I and II**

359, fall; 360, spring. 4 credits each term. Recommended for students who intend to specialize in chemistry or closely related fields. Enrollment limited. Prerequisites: Chemistry 216 with a grade of B or better, Chemistry 208 with a grade of A or better, or permission of instructor. Prerequisite for Chemistry 360: Chemistry 359. Recommended: coregistration in Chemistry 300-301-302. Lec, M W F 9:05; dis sec, W 7:30 p.m.; prelims, 7:30-9:00 p.m., Sept. 23, Oct. 21, Nov. 11, Spring: 7:30-9:00 p.m., Feb. 10, March 10, April 7. Fall: D. A. Usher; spring, D. B. Collum.

A rigorous and systematic study of organic compounds, their structures, the mechanisms of their reactions, and the ways they are synthesized in nature and in the laboratory.

**CHEM 389-390 Physical Chemistry I and II**

389, fall; 390, spring. 4 credits each term. Prerequisites: Mathematics 213 or, ideally, 221-222; Physics 208; Chemistry 208 or 216 or permission of instructor. Prerequisite for Chemistry 390: Chemistry 389. Lec, 389: M W F 10:10; rec M or W 1:25 or T 9:05. Lec, 390: M W F 10:10; prelims: 7:30-9 p.m. 389: Oct. 1, Nov. 3, Dec. 1. 390: Feb. 18, March 16, April 20. Fall: M. Hines; spring: 390: B. Widom.

The principles of physical chemistry are studied from the standpoint of the laws of thermodynamics, kinetic theory, statistical mechanics, and quantum chemistry.

**CHEM 391 Physical Chemistry II (also CHEM E 391)**

Spring. 4 credits. Enrollment limited to engineering students only. Prerequisites: Mathematics 293; Physics 112, 213; Chemistry 208 or 216 or permission of instructor. Co-requisite: Math 294. Prerequisite for Chemistry 391: Chemistry 389. Lec, M W F 9:05; rec M 1:25 or T 9:05; prelims: 7:30-9 p.m. Mar. 9, Apr. 13. B. Anton.

The principles of physical chemistry are studied from the standpoint of the laws of thermodynamics, kinetic theory, statistical mechanics, and quantum chemistry.

**CHEM 404 Entrepreneurship in Chemical Enterprise**

Spring. 1 credit. Enrollment open to seniors; others with permission of the instructor. Enrollment may be limited. Lec, T 3:00-4:30. B. Ganem.

Designed to acquaint students having a technical background in chemistry with the problems of planning, starting, and managing a new scientifically oriented business venture, the course will consist of six weekly 90-minute meetings focusing on case studies and assigned reading, as well as outside lectures by entrepreneurs in the chemical, pharmaceutical, and biotechnology industries. Topics will include new technology evaluation and assessment, business formation, resource allocation, management development, as well as manufacturing and sales issues.

**[CHEM 405 Techniques of Modern Synthetic Chemistry]**

Spring. 3 or 6 credits. Enrollment limited. Prerequisites: Chemistry 302 and permission of instructor. To receive three credits, students must perform a minimum of three two-week experiments. Six credits will be given for three additional experiments. Completion of five exercises in elementary glass-blowing will count as one experiment. Lab time required: 16 hours each week, including at least two 4-hour sessions in one section (M W 1:25). First meeting will be at 1:30 on first class day of semester. Lec, first week only, at times to be arranged. Not offered 1998-99. J. M. Burlitch.

The syntheses of complex organic, organometallic, and inorganic molecules are carried out with emphasis on the following techniques: vacuum line, high pressure, high-temperature solid state, inert atmosphere, nonaqueous solvents, radioactive labeling, sol-gel, photochemical and electrochemical methods, solid phase peptide synthesis, and polymer synthesis. Elementary glassblowing.)

**[CHEM 410 Inorganic Chemistry]**

Fall. 4 credits. Prerequisites: Chemistry 358 or 360, and 287 or 390. Lects, M W F 11:15. Prelims: 7:30-9:00 p.m., Sept. 24, Oct. 22, Nov. 19. R. C. Fay.

A systematic study of the synthesis, structure, bonding, reactivity and uses of inorganic compounds, organometallic complexes and solid state species.

**[CHEM 421 Introduction to Inorganic Chemistry Research]**

Fall or spring. 2-4 credits. Prerequisites: Chemistry 303 and 389-390, or Chemistry 287-288, and Chemistry 289-290 with an average of B- or better, or permission of instructor. Selected faculty.

Research in inorganic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**[CHEM 433 Introduction to Analytical Chemistry Research]**

Fall or spring. 2-4 credits. Prerequisites: Chemistry 303 and 390 with an average of B- or better or permission of instructor. Selected faculty.

Research in analytical chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**[CHEM 461 Introduction to Organic Chemistry Research]**

Fall or spring. 2-4 credits. Prerequisites: Chemistry 302 and 358 or 360 with a grade of B- or better or permission of instructor. Selected faculty.

Research in organic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**[CHEM 477 Introduction to Physical Chemistry Research]**

Fall or spring. 2-4 credits. Prerequisite: Chemistry 390 with an average of B- or better or permission of instructor. Selected faculty.

Research in physical chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**[CHEM 498 Honors Seminar]**

Spring. No credit. Admission to standard chemistry majors only by departmental invitation. Additional prerequisites or corequisites: outstanding performance in

either (1) two coherent 4-credit units of research in a course such as Chemistry 421, 433, 461, or 477; or (2) one 4-credit unit in a course such as Chemistry 421, 433, 461, or 477 and summer research equivalent to at least 4 credits in the same subject. W 2:30-4. J. Meinwald.

Informal presentations and discussions of selected topics in which all students participate. Individual research is on advanced problems in chemistry or a related subject under the guidance of a faculty member, culminating in a written report.

**[CHEM 600-601 General Chemistry Colloquium]**

600, fall; 601, spring. No credit. Required of all graduate students except those majoring in organic or bioorganic chemistry. Juniors and seniors are encouraged to attend. R 4:40. Fall: J. H. Freed; spring: J. H. Freed.

A series of talks representative of all fields of current research interest in chemistry other than organic chemistry, given by distinguished visitors and faculty members.

**[CHEM 602 Information Literacy for the Physical Scientist]**

Spring. 1 credit. Primarily for undergraduate chemistry majors doing research and first-year graduate students. Lec, W 4:45-6:00. Not offered 1998-99.

An introduction to physical science information research methods, including use of paper and electronic resources. With the continued information explosion, much time can be wasted and important information missed unless an efficient information research strategy is developed. This course demonstrates the use of library and information resources as a method to start and critically evaluate the success of research projects. Text: *Journal Literature of the Physical Sciences* by Alice Leffer Primack and *Chemical Information Sources* by Gary Wiggins.]

**[CHEM 605 Advanced Inorganic Chemistry I: Symmetry, Structure, and Reactivity]**

Fall. 4 credits. Prerequisite: Chemistry 389-390 or equivalent or permission of instructor. Lects, M W F 11:15. R. C. Fay.

Selected topics in structure, bonding, and reactivity of inorganic compounds with emphasis on main group elements; at the level of *Chemistry of the Elements*, by Greenwood and Earnshaw. Group theory applications: hybrid orbitals, molecular orbitals, molecular vibrations, and ligand field theory; at the level of Cotton's *Chemical Applications of Group Theory*.

**[CHEM 606 Advanced Inorganic Chemistry II: Synthesis, Structure, and Reactivity of Coordination Compounds, and Bioinorganic Chemistry]**

Spring. 4 credits. Lects, M W F 10:10. P. T. Wolczanski.

Synthesis, structure, and reactivity of coordination compounds and organometallic complexes. Emphasis on bonding models, structure, and reactivity, including the elucidation of mechanisms. Readings at the level of Purcell and Kotz's *Inorganic Chemistry*, and Jordan's *Reaction Mechanisms of Inorganic and Organometallic Systems*.

**[CHEM 607 Advanced Inorganic Chemistry III: Solid-State Chemistry]**

Spring. 4 credits. Prerequisite: Chemistry 605 or permission of instructor. Lects, M W F 11:15. F. J. DiSalvo.

The third of a three-term sequence. Interdisciplinary approach to solids. Topics include solid-state structure and X-ray diffraction, synthesis methods, defects in solids, phase diagrams, electronic structure, and chemical and physical properties of solids. Text: *Solid State Chemistry and Its Applications*, by West. Readings from inorganic chemistry and solid-state physics texts.

**[CHEM 608 Organometallic Chemistry]**

Spring. 4 credits. Not offered 1998-99. P. T. Wolczanski.

Synthesis, structure, and reactivity of organotransition metal complexes. Current literature is emphasized, and background readings are at the level of Collman, Hefedus, Finke and Norton's "Principles and Applications of Organotransition Metal Chemistry".]

**[CHEM 622 Chemical Communication]**

Fall. 3 credits. Lects, M W F 10:10. J. Meinwald, T. Eisner.

For description, see BIONB 623.

**[CHEM 625 Advanced Analytical Chemistry I]**

Spring. 4 credits. Prerequisite: Chemistry 288 or 390 or equivalent. Lects, M W F 9:05; occasional prelims W 7:30 p.m. C. F. Wilcox.

The application of molecular spectroscopy to chemical problems. Topics in infrared, NMR, and mass spectroscopy are discussed.

**[CHEM 627 Advanced Analytical Chemistry II]**

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 390 or equivalent; but Chemistry 793 or equivalent would be helpful. Lects, M W F 12:20. Not offered 1998-99. D. B. Zax.

Modern techniques in nuclear magnetic resonance. Little overlap is expected with Chem 625, as this course will focus on more general questions of experimental design, understanding of multipulse experiments, and aspects of coherent averaging theory. Example to be taken from both liquid and solid-state NMR. May also be of interest to other coherent spectroscopies.]

**[CHEM 628 Trace Element and Isotopic Analysis (also Nutritional Sciences 690)]**

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390, or Chemistry 208 and Mathematics 112, or permission of instructor. Offered alternate years. Lects, T R 10:10. Not offered 1998-99. J. T. Brenna.

Modern trace, micro, and surface methods of analysis, including atomic spectrometry, solids mass spectrometry, high precision isotope ratio techniques, microscopic, microprobe, and electron spectroscopy. Applications to biological and solid state problems.]

**[CHEM 629 Electrochemistry]**

Fall. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: Chemistry 390 or equivalent (Mathematics 213 helpful). Lects, T R 8:40-9:55. Not offered 1998-99. H. D. Abruna.

Fundamentals and applications of electrochemistry. Topics will include the fundamentals of electrode kinetics, electron transfer theory, the electrical double layer, diffusion,



and other modes of transport. A wide range of techniques and their application as well as instrumental aspects will be covered.]

**CHEM 650-651 Organic and Organometallic Chemistry Seminar**

650, fall; 651, spring. No credit. Required of all graduate students majoring in organic or bioorganic chemistry. Juniors and seniors are encouraged to attend. M 4:30. D. B. Collum.

A series of talks representative of all fields of current research interest in organic and organometallic chemistry, given by research associates, faculty members, and distinguished visitors.

**CHEM 665 Advanced Organic Chemistry**

Fall. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisites: Chemistry 253 or 358 or 360, and 390 or equivalents or permission of instructor. Lects, M W F 12:20. D. B. Collum.

A survey of reaction mechanisms and reactive intermediates in organic chemistry.

**CHEM 666 Synthetic Organic Chemistry**

Spring. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: Chemistry 665 or permission of instructor. Lects, T R 10:10-11:25. B. Ganem.

Modern techniques of organic synthesis; applications of organic reaction mechanisms and retrosynthetic analysis to the problems encountered in rational multistep synthesis, with particular emphasis on modern developments in synthesis design.

**CHEM 668 Chemical Aspects of Biological Processes**

Fall. 4 credits. Prerequisite: Chemistry 360 or equivalent. Lects, T R 8:40-9:55. T. P. Begley.

A representative selection of the most important classes of enzyme-catalyzed reactions will be examined from a mechanistic perspective. Topics discussed will include the chemical basis of enzymatic catalysis, techniques for the elucidation of enzyme mechanism, cofactor chemistry, and the biosynthesis of selected natural products. The application of chemical principles to understanding biological processes will be emphasized.

**CHEM 670 Fundamental Principles of Polymer Chemistry**

Fall. 4 credits. Prerequisite: Physical Chemistry 389/390 and Organic Chemistry 359/360 or equivalent or by permission of instructor. Primarily for graduate students and advanced undergraduates. No previous knowledge of polymers is required. Lects, T R 10:00-11:15. G. W. Coates.

This course emphasizes general concepts and fundamental principles of polymer chemistry. The first part of the course deals with general introduction to classes of polymers, molar masses and their distributions, and a brief survey of major methods of polymer synthesis—radical, step growth, ionic, group transfer, Ziegler-Natta and metathesis polymerization methods—with emphasis on kinetics and mechanisms rather than on structure. The second part deals with characterization and physical properties. These include: solution properties—solubility and solubility parameters, solution viscosity, molecular weight characterizations [gel

permeation chromatography, viscometry, light scattering, osmometry]; bulk properties—thermal and mechanical properties; and structure-property relationships. The discussions will focus on chemistry rather than engineering of polymers.

**CHEM 671 Synthetic Polymer Chemistry (also Materials Science and Engineering 671 and Chemical Engineering 675)**

Spring. 4 credits. Prerequisite: Chemistry 359-360 or equivalent or permission of instructor; recommended: knowledge of material covered in Chemistry 670 will be useful but not required; Materials Science and Engineering 620. Lects, T R 8:30-10:00. D. Y. Sogah.

Modern concepts in synthetic polymer chemistry. The application of organic synthetic methods to the development of new polymers and copolymers and the control of their architecture. Topics include chain and step-growth polymerizations, reactions of polymers, block and graft copolymers, dendrimers and star polymers. A broad spectrum of applications from recent literature will also be discussed.

**CHEM 672 Protein Kinetics**

Fall. 4 credits. Primarily for graduate students with interests in biophysical chemistry. Prerequisite: Chemistry 288 or 390, BIOBN 331, or equivalents or permission of instructor. Lects, M W F 10:10. B. A. Baird.

Focus is on protein interactions with ligands and consequent changes in structure and activity. Topics include: protein structure and dynamics; thermodynamics and kinetics of ligand binding; steady state and transient enzyme kinetics; enzyme catalysis and regulation; role of cell membrane receptors in regulating cellular activities.

**[CHEM 677 Chemistry of Nucleic Acids]**

Spring. 4 credits. Primarily for graduate students. Prerequisites: Chemistry 358 or 360, and 390 or equivalents. S-U grades only. Lects, M W 10-11:10. Not offered 1998-99. D. A. Usher.

Properties, synthesis, reactions, and biochemical reactions of nucleic acids.]

**CHEM 678 Statistical Thermodynamics**

Fall. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 390 or equivalent. Lects, M W F 10:10. B. Widom.

Classical thermodynamics followed by the principles of statistical thermodynamics. Ensembles and partition functions. Ideal gases and crystals. Thermodynamic properties from spectroscopic and structural data. Chemical equilibrium. Dense gases; virial coefficients. Statistical mechanics of solutions. Bose-Einstein and Fermi-Dirac Statistics. At the level of the first twelve chapters of *Statistical Mechanics* by McQuarrie.

**[CHEM 681 Physical Chemistry III]**

Fall. 4 credits. Prerequisites: Chemistry 288 or 390; Mathematics 213 and Physics 208; or equivalents. Not offered 1998-99.

An introduction to the principles of quantum theory and statistical mechanics, atomic and molecular spectra, and elementary valence theory. At the level of *Quantum Chemistry*, by Levine.]

**[CHEM 686 Physical Chemistry of Proteins]**

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalents. S-U grades. Letter grades for undergraduates. Offered alternate years. Not offered 1998-99.

Chemical constitution, molecular weight, and structural basis of proteins; thermodynamic, hydrodynamic, optical, spectroscopic, and electrical properties; protein and enzyme reactions; statistical mechanics of helix-coil transition in biopolymers; conformation of biopolymers; protein folding.]

**CHEM 700 Baker Lectures**

Fall, on dates to be announced. No credit. Distinguished scientists who have made significant contributions to chemistry present lectures for periods varying from a few weeks to a full term. This year's lecturer: Prof. John Brauman, Stanford University.

**[CHEM 701-702 Introductory Graduate Seminar in Analytical, Inorganic, and Physical Chemistry]**

701, fall; 702, spring. No credit. Required of all first-year graduate students majoring in analytical, inorganic, physical, theoretical, and biophysical chemistry. Not offered 1998-99.]

**[CHEM 716 Special Topics in Advanced Inorganic Chemistry (Bonding in Molecules)]**

Spring. 3 credits. Prerequisite: some exposure to (or a course in) quantum mechanics. A good undergraduate physical chemistry course may be sufficient, while Physics 443 or Chemistry 793 or Chemistry 794 are at a substantially higher level than what is needed. Lects, M W F 12:20. Not offered 1998-99. R. Hoffman.

The purpose of this course is to build a qualitative picture of the bonding in all molecules, including organic, inorganic, organometallic systems and extended structures (polymers, surfaces and three-dimensional materials). The approach uses molecular orbital theory to shape a language of orbital interactions. Most quantum mechanic ideas needed will be taught along the way; the course is specifically directed at organic, inorganic, and polymer chemists who are not theoreticians.]

**[CHEM 745 Physical Polymer Science I (also Chemical Engineering 745)]**

Fall. 3 credits. Prerequisite: a graduate-level thermodynamics statistical course. Offered alternative years. Lects, M W 2:55-4:10. Not offered 1998-99. C. Cohen.

Thermodynamic properties of dilute, semidilute, and concentrated solutions from both classical and scaling approaches. Characterization techniques of dilute solutions: osmometry, light scattering, viscometry, and sedimentation. Rubber elasticity; mechanical and thermodynamic properties of gels. Polymer melts: equations of state and glass transition phenomenon.]

**[CHEM 762 Special Topics in Organic Chemistry: Fundamentals of Polymer Chemistry]**

Fall. 4 credits. Prerequisite: Physical Chem 389/390 and Organic Chem 359/360 or equivalent or permission of instructor. Primarily for graduate and advanced undergraduate students. Lects, T R 8:30-10:00. Not offered 1998-99.

Introduction to polymer physical chemistry. Kinetics and mechanisms of Polymerization methods: Ionic, radical, step-growth and group transfer polymerization. Polymer Stereochemistry. Solution properties: Molecular weight characterization and polymer solubility. Mechanical and Thermal Properties. Structure-Property Relations. The discussions will focus on chemistry rather than engineering of polymers and examples will be taken from current literature.]

**CHEM 765 Physical Organic Chemistry I**  
Fall. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 665 or permission of instructor. Lects, M W F 10:10. C. F. Wilcox.

Application of computational and experimental techniques to studies of organic reaction mechanisms and the properties of reactive intermediates.

**CHEM 766 Physical Organic Chemistry II**

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 765 or permission of instructor. Not offered 1998-99.]

**CHEM 774 Chemistry of Natural Products: Combinatorial Chemistry**

Spring. 3 credits. Prerequisites: Chemistry 360 and BIOBM 330 or equivalent. Lec, T R 10:10-11:30. T. P. Begley.

Combinatorial chemistry has revolutionized the way organic chemists think about structure function studies on biological systems and the design of inhibitors. This course will explore the design, synthesis, screening, and use of natural (i.e., peptide, protein, nucleic acid, carbohydrate) and unnatural (i.e., totally synthetic) libraries.

**CHEM 780 Chemical Kinetics and Molecular Reaction Dynamics**

Fall. 4 credits. Prerequisite: Chemistry 681 or permission of instructor. Lects, T R 10:10-11:25. H. F. Davis.

Principles and theories of chemical kinetics and molecular reaction dynamics. Topics include potential energy surfaces, transition state theory, and statistical theories of unimolecular decomposition. Depending on class interest, the course will also include special topics such as surface reactions and photochemistry.

**CHEM 782 Special Topics in Biophysical and Bioorganic Chemistry**

Spring. 3 credits. Lects, T R 11:15. Not offered 1998-99.

Topics vary from year to year.]

**CHEM 788 Macromolecular Crystallography (also BIOBM 738)**

Spring. 3 credits. S-U grades optional. Prerequisite: permission of instructor. Offered alternate years. Lects, M W F 10:10. Not offered 1998-99. S. A. Ealick, P. A. Karplus, J. C. Clardy.

Lectures briefly cover the fundamentals of crystallography and focus on methods for determining the 3-dimensional structures of macromolecules. These include crystallization, data collection, multiple isomorphous replacement, molecular replacement, model building, refinement, and structure interpretation.]

**CHEM 789 X-ray Crystallography**

Spring. 4 credits. Prerequisite: Chemistry 288 or 390 or permission of instructor. Offered alternate years. Lects, M W F 10:10. Not offered 1998-99. J. Clardy.

A beginning course in the applications of X-ray crystallography to chemistry. Topics include symmetry properties of crystals, diffraction of X-rays by crystals, interpretation of diffraction data, and refinement of structures. The chemical information available from a diffraction experiment is stressed, and practical aspects are incorporated.]

**CHEM 791 Spectroscopy**

Fall. 4 credits. Prerequisite: Chemistry 793 or Physics 443 or equivalent. Lects, T R 8:40-9:55. J. H. Freed.

Principles of one- and two-dimensional magnetic resonance spectroscopies. Topics will include time-domain versus frequency-domain spectroscopy, multiple pulse and double resonance techniques, two-dimensional coherence spectroscopy, multiple-quantum spectroscopy, and spin-relaxation. At the level of Slichter's *Principles of Magnetic Resonance*, 3rd Edition.

**CHEM 792 Molecular Collision Theory**

Spring. 4 credits. Lects, T R 10:10-11:25. G. S. Ezra.

The concepts and methods of scattering theory are described with particular emphasis on applications to problems of chemical interest. At the level of Child's *Molecular Collision Theory* and Taylor's *Scattering Theory*.

**CHEM 793 Quantum Mechanics I**

Fall. 4 credits. Prerequisites: Chemistry 390, coregistration in A&EP 321 or equivalents or permission of instructor. Lects, M W F 11:15. G. S. Ezra.

Schrodinger's equation, wave packets, uncertainty principle, WKB theory, matrix mechanics, orbital and spin angular momentum, exclusion principle, perturbation theory, variational principle. At the level of Cohen-Tannoudji's *Quantum Mechanics*.

**CHEM 794 Quantum Mechanics II**

Spring. 4 credits. Prerequisites: Chemistry 793 or equivalent and the equivalent of or coregistration in Physics 432 and Mathematics 422, or permission of instructor. Lects, T R 10:10-11:25. R. Loring.

Quantum structure of atoms and molecules. Time-dependent phenomena in quantum mechanics and light/matter interaction. Molecular spectroscopy. Group theory. At the level of Weissbluth's *Atoms and Molecules*, Levine's *Quantum Chemistry*, and Sakurai's *Modern Quantum Mechanics*.

**CHEM 796 Statistical Mechanics**

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 678 and 793 or equivalent. Lects, T R 8:30-9:55. R. Loring.

Statistical mechanics of systems of interacting molecules. Structure and thermodynamics of classical liquids. Phase transitions and critical phenomena. Inhomogeneous fluids. Introduction to non-equilibrium statistical mechanics. Students are presumed to have taken a course in statistical thermodynamics at the level of the first twelve chapters of *Statistical Mechanics*, by McQuarrie.

**CHEM 798 Special Topics in Physical Chemistry (Chemical Bonding in Polymers, Surfaces and the Solid State)**

Spring. 4 credits. Prerequisite: Chemistry 605, or 681, or 793, or Physics 443, or the equivalent. Lects, T R 10:10-11:25. R. Hoffmann.

The qualitative aspects of the electronic structure and chemical bonding on extended one-, two-, and three-dimensional systems will be discussed, in a way accessible to a wide range of inorganic and organic chemists, and to engineers and physicists as well.

## CHINESE

See Language Courses under Languages and Linguistics.

FALCON Program (Chinese)

J. Wheatley, 416 Morrill Hall, 255-9301.

## CLASSICS

J. Rusten (chair), L. S. Abel, F. M. Ahl, C. Brittain, K. Clinton, J. E. Coleman, J. R. Ginsburg (director of undergraduate studies), E. Hohendahl, G. Holst-Warhaft, G. M. Kirkwood (emeritus), H. Kolias, M. Landon, D. Mankin, G. M. Messing (emeritus), C. Minkowski, A. Nussbaum, H. Pelliccia (director of graduate studies), P. Pucci, H. R. Rawlings III, J. Reed, D. R. Shanzer

Cornell University has long recognized the importance of studying the civilizations of ancient Greece and Rome. Particularly in an age of increasing specialization, study of the Classics is widely viewed as an excellent means of acquiring a liberal education; at Cornell, we are deeply interested in the continuing humanistic values contained in the literature of the ancient world and in gaining a fuller understanding of these important cultures and their imprint upon subsequent ages.

The Department of Classics at Cornell is one of the oldest and largest in the country. With nineteen faculty members, together with professors of related interests in the departments of History, Philosophy, Comparative Literature, History of Art, Modern Languages, Linguistics, and Near Eastern Studies and in the Archaeology, Medieval Studies, and Religious Studies programs, the range of instruction available is very large, including not only the traditional study of language, literature, and ancient history, but also newer developments in the field, such as comparative study of Mediterranean civilizations and modern literary theory.

Although Classics, like other areas of humanistic study, does not aim at providing specific preprofessional training, over the years Classics majors from Cornell have gone on to a wide variety of careers: in law, teaching, medicine, diplomacy, management, educational administration, government, and many others.

The department offers courses in Bronze Age and Classical archaeology and is active in field projects in Classical lands. It sponsors archaeological excavations at Halai in Greece, which serves as a field training school for

Cornell undergraduate and graduate students. On campus there are also collections of ancient artifacts, reproductions of ancient sculpture, and one of the few laboratories in the world to concentrate on the tree-ring dating of ancient monuments from Greece, Cyprus, and Turkey. The archaeology courses may be used to satisfy some of the requirements for the Intercollege Program in Archaeology or for the major in Classical Civilization. They require no knowledge of either Greek or Latin. Similarly, the department offers a variety of courses and seminars in English on such subjects as Greek mythology, Greek and Roman mystery religions, early Christianity, and Greek and Roman society, as well as ancient epic, tragedy, history, and philosophy. For those whose interest in things Greek and Roman extends no further than a desire to understand the English language a little better, the department offers one course in the Greek and Latin elements that make up a huge proportion of the vocabulary of Modern English, and another that deals more specifically with the Greek and Latin ingredients of bioscientific vocabulary. Programs in Greek and Latin at the elementary level are also offered, of course; and for the more ambitious there are courses involving reading, in the original, of Greek and Latin authors from Homer to St. Augustine and Bede and, periodically, the Latin works of Dante, Petrarch, and Milton. Sanskrit, the classical language of ancient India, is also offered, along with courses in translation on Indic religion, myth, and literature. The department makes every attempt to adapt its program to the needs of each student. If there is a Classical writer you would like to study, the department will do its best to help you do so whether you are a major in the department or not.

## Majors

The Department of Classics offers majors in Classics, Greek, Latin, and Classical Civilization.

## Classics

The Classics major comprises seven courses in advanced Greek and Latin (numbered 201 or above) and 3 courses in related subjects (see below) selected in consultation with the adviser. Classics majors are required to take a minimum of one 300-level course in one language and two 300-level courses in the other.

Students who are considering the option of undertaking graduate study in Classics are strongly advised to complete the Classics major.

## Greek

The Greek major comprises Classics 201 plus 5 advanced courses in Greek (numbered 203 and above) of which at least 3 are to be taken at the 300-level, and 3 courses in related subjects (see below) selected in consultation with the adviser.

## Latin

The Latin major comprises Classics 205 plus 5 advanced courses in Latin (numbered 207 and above) of which at least 3 are to be taken at the 300-level, and 3 courses in related subjects (see below) selected in consultation with the adviser.

## Classical Civilization

Those who major in Classical Civilization must complete (a) qualification in Latin and Greek or proficiency in either; (b) Classics 211 (or History 265), Classics 212 (or History 268), and Classics 220, plus 5 courses selected from those listed under Classical civilization, Classical archaeology, Ancient Philosophy, Latin, and Greek; and (c) 3 courses in related subjects (see below) selected in consultation with the adviser.

## Related Subjects

The field or scope of the subject "Classics" is the interdisciplinary study of Greek and Roman antiquity, comprising Greek and Latin language, literature, and linguistics; ancient philosophy; history; archaeology and art history; papyrology; epigraphy; and numismatics. It covers the ancient Mediterranean and neighboring lands as they were during the period extending from approximately 3000 B.C.E. to the 6th century C.E. In addition to the required courses in language and literature, the major includes related courses intended to give breadth and exposure to the other disciplines within the field and to enrich the student's study of the original languages. Since the influence of the Greco-Roman world extended far beyond antiquity, a related course could well focus on some aspect of the classical tradition in a later period. Students select related courses in consultation with their advisors or the DUS.

## Honors

Candidates for the degree of Bachelor of Arts with honors in Classics, Greek, Latin, or Classical civilization must fulfill the requirements of the appropriate major study as given above and must also successfully complete the special honors course 472. Credit for the honors course may be included in the credits required for the major. Students who wish to become candidates for honors must have a cumulative average of B, and B+ in the major. In consultation with the Standing Committee on Honors the students should choose an honors adviser by the end of their sixth semester. By the second week of their seventh semester they should submit an outline of their proposed honors work to the Standing Committee and to the adviser(s). The thesis will be written under the supervision of the honors adviser(s) chosen by the student. Honors advisers will submit recommendations to the Standing Committee on Honors. The Committee will read all honors theses and will determine the level of departmental honors. A copy of each successful honors thesis will be filed with the department.

## Independent Study

Independent study at the 300 level may be undertaken by undergraduates upon completion of one semester of work at the 300 level. 200-level independent study may be undertaken only in the case of documented schedule conflict upon application to the DUS.

## Study Abroad

Cornell participates in the Intercollegiate Center for Classical Studies in Rome, which offers courses in Latin, Greek, ancient history, art, archaeology, and Italian. Another opportunity for a semester's study abroad is available through Cornell Abroad in Greece at

the Athens Centre. (Consult Cornell Abroad for details.) In addition, Cornell is a member institution of the American School of Classical Studies at Athens, whose Summer Program is open to graduate students and qualified undergraduates. The American Academy in Rome, of which Cornell is also a member institution, offers full-year and summer programs for qualified graduate students. For graduate students the Department of Classics offers a few travel grants each year from the Townsend Memorial Fund. Detailed information on these programs is available in the Department of Classics Office, 120 Goldwin Smith Hall.

## Summer Support for Language Study

The Beatrice R. Kanders Memorial Scholarship (for the summer immediately following the freshman or sophomore year; preference given to dyslexic students) and a certain amount of tuition aid made possible by gifts from the Constantinos C. Polychronis Foundation are normally available to students who want to enroll in Intensive Latin or Greek in the Cornell summer session. These courses are designed to enable students to enter second-year Latin or Greek the following fall. Preference is given to Classics undergraduate majors, and other students needing Latin or Greek for completion of their majors. Applications are due to the chair of the Department of Classics by March 26.

## Placement in Latin, Ancient Greek, and Modern Greek

Placement of first-year students in Latin, ancient Greek, and modern Greek courses is determined by an examination given by the Department of Classics during orientation week or by arrangement with the director of undergraduate studies.

## Freshman Writing Seminars

The department offers freshman writing seminars on a variety of topics. Consult John S. Knight Writing Seminar Program brochures for times, instructors, and descriptions.

## Classical Civilization

### CLASS 100 Word Power: Greek and Latin Elements in the English Language

Spring. 3 credits. I. Hohendahl. This course gives the student with no knowledge of the classical languages an understanding of how the Greek and Latin elements that make up over half our English vocabulary operate in both literary and scientific English usage. Attention is paid to how words acquire their meaning and to enlarging each student's working knowledge of vocabulary and grammar.

### [CLASS 102 Bioscientific Terminology

3 credits. Not offered 1998-99; next offered 1999-2000. Staff.

A study of the Greek and Latin word elements that combine to form most of the specialized terms in the biological sciences. The student who learns the meanings of those elements and the rules of word formation can usually recognize the basic meaning of any unfamiliar word in that field. This skill is especially valuable for pre-medical, pre-dental, pre-veterinary students, and for those in other

health science fields, as well as for students who would like to broaden their general vocabulary.]

**CLASS 211 The Greek Experience #**  
Fall. 3 credits. Limited to 50 students.  
F. Ahl.

An introduction to the literature and thought of ancient Greece. Topics will include epic and lyric poetry, tragedy and comedy, and historical, political, philosophical, and scientific writings. Some attention will also be given to the daily life of ordinary citizens, supplemented by slides of ancient art and architecture.

**CLASS 212 The Roman Experience #**  
Spring. 3 credits. Limited to 100 students.  
D. Mankin.

An introduction to the civilization of the Romans as expressed in their literature, religion, and social and political institutions.

**CLASS 217 Initiation to Greek Culture #**  
Fall. 4 credits. Limited to 18 students.  
This course is intended especially for freshmen (a few exceptionally motivated sophomores or upperclass students may be accepted). Apply in writing to the chair. Department of Classics, 120 Goldwin Smith Hall. P. Pucci and L. S. Abel.

Knowledge of Greek or Latin is not necessary, since all texts are in translation. What is necessary is the willingness to participate in three one-hour seminars each week and also a supplementary one-hour (occasionally two-hour) session, during which the class will participate in workshops with specially invited guests.

This course will examine the development in Greek thought from mythological to philosophical explanations of the world and man's place in it. Readings will include Homer, Aeschylus, Sophocles, Euripides, the pre-Socratics, Plato, and Aristotle, as well as works by such seminal modern thinkers as Hegel, Nietzsche, Heidegger, and Derrida.

**CLASS 218 Initiation to the Classical Tradition: Strange Voyages #**  
Spring. 4 credits. See Classics 217 frontmatter above. D. Shanzer.

The theme is travel and the depiction of the World, The Here and Now, the Hereafter (Heaven, Purgatory, and Hell), and Other Worlds. Readings (in part selections) will include the *Odyssey*, the *Aeneid*, the *Gospel of Nicodemus*, Lucian, *Saint Brendan's Voyage*, Dante's *Inferno*, Chesterton's *Man who was Thursday*, C. S. Lewis's *Out of the Silent Planet*, and M. Atwood's *Handmaid's Tale*.

**CLASS 223 The Comic Theater (also Comparative Literature 223 and Theatre Arts 223) #**  
Spring and summer 1999. 3 credits.  
J. Rusten.

The origins of comic drama in ancient Greece and Rome, and its subsequent incarnations especially in the Italian renaissance (*Commedia erudita* and *Commedia dell'arte*), Elizabethan England, seventeenth-century France, the English Restoration, and Hollywood in the thirties and forties. Chief topics will be: the growth of the comic theatrical tradition and conventions; techniques and themes of comic plots (trickster, parody, farce, caricature); and the role of comedy in society. All readings in English.

**CLASS 231 Ancient Philosophy (also Philosophy 211) #**  
Fall. 4 credits. C. Brittain.

For description, see PHIL 211.

**CLASS 236 Greek Mythology (also Comparative Literature 236) #**  
Fall 1998 and summer 1999. 3 credits.  
Limited to 200 students. D. Mankin.

A survey of the Greek myths, with emphasis on the content and significance of the myths in Mediterranean society, including the place of myth in Greek life and consciousness; the factors and influences involved in the creation of myths; and the use of myths for our understanding of Greek literature, religion, and moral and political concepts.

**[CLASS 237 Greek Religion and Mystery Cults (also Religious Studies 237) #**  
3 credits. Not offered 1998-99; next offered 1999-2000. K. Clinton.

Greek religion constitutes one of the essential features of ancient Greek civilization and distinguishes it from later Western civilization. Since religion permeates Greek culture, including the major art forms (epic poetry, tragedy, comedy, architecture, painting, and sculpture), the course will investigate the interaction of religion with these forms—an investigation that is fruitful both for the understanding of Greek religion and the forms themselves, some of which, like tragedy, originated in cult. A representative variety of cults and their history will be studied with special emphasis on mystery cults, such as the Eleusinian mysteries of Demeter and Persephone, the Kabirot, the Great Gods of Samothrace, and Bacchic rites.]

**[CLASS 238 The Ancient Epic and Beyond #**  
3 credits. Not offered 1998-99.  
H. Pelliccia.

We will move, Odysseus-like, to the West: beginning with Homer's *Iliad* (and including the British poet Christopher Logue's "account" of the opening books) and *Odyssey*, we will continue in the Hellenistic and Augustan eras with Apollonius of Rhodes' *Argonautica* and Virgil's *Aeneid*. A violent shift in space and time will have us conclude with two New World maritime epics: Herman Melville's *Moby Dick* and Derek Walcott's *Omeros*.]

**CLASS 268 A History of Rome from Republic to Holy City (also History 268) #**

Spring. 4 credits. Open to freshmen.  
J. Ginsburg.

For description, see HIST 268.

**[CLASS 291 Classical Indian Narrative (also Asian Studies 291) @ #**  
Spring. 3 credits. Not offered 1998-99.  
C. Minkowski.]

**CLASS 303-304 Independent Study in Classical Civilization, Undergraduate Level**

303, fall; 304, spring. Up to 4 credits.

**CLASS 333 Greek and Roman Mystery Cults and Early Christianity (also Religious Studies 333) #**

Fall. 4 credits. A previous course in Classics (civilization or language) or Religious Studies 101 is recommended.  
K. Clinton.

A study of the controversial question of religious continuity between paganism and early Christianity. After a brief survey of classical mystery cults and Hellenistic religion,

the course will focus on such Hellenistic cults as the mystery cults of Isis, Bacchus, and Attis and the Great Mother and on the distinctive features that contributed to their success. Discussion of Christian liturgy and beliefs to determine what Christianity owed to its pagan predecessors and to isolate the factors that contributed to its triumph over the "rival" pagan cults of late antiquity.

**[CLASS 345 The Tragic Theater (also Comparative Literature 344 and Theatre Arts 345) #**

4 credits. Limited to 40 students. Not offered 1998-99. F. Ahl.

Tragedy and its audiences from ancient Greece to modern theater and film. Topics: origins of theatrical conventions; Shakespeare and Seneca; tragedy in modern theater and film. Works studied will include: Aeschylus' *Agamemnon*; Sophocles' *Oedipus Tyrannus*, *Philoctetes*; Euripides' *Alcestis*, *Helen*, *Iphigeneia in Aulis*, *Orestes*; Seneca's *Thyestes*, *Trojan Women*; Shakespeare's *Julius Caesar*, *Titus Andronicus*, *Othello*; Strindberg's *The Father*; Dürrenmatt's *The Visit*; Bergman's *Seventh Seal*; Cacoyannis' *Iphigeneia*.]

**[CLASS 363 Representations of Women in Ancient Greece and Rome (also History 367 and Women's Studies 363) #**

4 credits. Not offered 1998-99; next offered 1999-2000. L. S. Abel and J. Ginsburg.

Analysis of ancient Greek and Roman representations of women—some famous, some infamous, some nameless—within their historical and cultural contexts and the assumptions that underlie these representations. Using literary, historical, legal, and artistic sources (in translation) and examining the historiographical and methodological problems the use of such evidence poses, the class will assess the changing social conditions that relate to the roles, status, and images of women in antiquity. Among the topics considered are: myth and ideology, women's role in the family and society, views of the female body and female sexuality, the place of women in creative art.]

**CLASS 382 Greeks, Romans, and Victorians (also Comparative Literature 382) #**

Fall. 4 credits. F. Ahl.

This course explores how nineteenth-century (and especially Victorian English and Irish) poets, dramatists, and to a lesser extent, novelists, present Greco-Roman antiquity. The varied influences of Vergil and Homer, Seneca and Sophocles, Plautus and Aristophanes, Horace, and Greek lyric poetry will be discussed in selected works of Thomas More, Shelley, Byron, Swinburne, W.S. Gilbert, Oscar Wilde, and the pre-Raphaelites and Victorian poets.

**CLASS 390 The Sanskrit Epics (also Asian Studies 390) @ #**

Spring. 4 credits. C. Minkowski.  
For description, see ASIAN 390.

**CLASS 395 Classical Indian Philosophical Systems (also Asian Studies 395 and Religious Studies 395) @ #**

Fall. 4 credits. Prerequisite: some background in philosophy or in classical Indian culture. C. Minkowski.  
For description, see ASIAN 395.



**[CLASS 463 Gender and Politics in the Roman World (also History 463 and Women's Studies 464) #**

4 credits. Not offered 1998–99; next offered fall 1999–2000. J. Ginsburg.  
An undergraduate seminar examining the relationship between gender and politics in the late Roman Republic and early Empire. Among the questions this course will address are: was politics the exclusive domain of men in Roman society (as is generally assumed) or does a broader definition of politics and an understanding of the various forms political activity in ancient Rome might take allow a place for women in Roman political life? what role does gender have in Roman political discourse and ideology? why do issues such as family, marriage, and sexuality become subjects of political debate and legislation?

**[CLASS 480 Roman Society and Politics under the Julio-Claudians (also History 473) #**

4 credits. Prerequisite: Classics 212, History 268, or permission of instructor. Not offered 1998–99; next offered 1999–2000. J. Ginsburg.  
This course examines several of the important social and political changes in Roman society under Augustus and his successors, the Julio-Claudians. Topics to be investigated include Augustus's consolidation of power through political and social revolution, the Augustan attempt to regulate family life and social relations by legislation, the relation of the emperor Tiberius with the members of the old ruling class, the growth of the imperial bureaucracy and the new opportunities for social mobility, the political opposition to Claudius and Nero. Nero's cultural and provincial policy, and the manipulation of the imperial cult. All readings will be in English.]

**[CLASS 711-712 Independent Study for Graduate Students in Classical Civilization**

711, fall; 712, spring. Up to 4 credits.

**Greek****CLASS 101 Greek for Beginners**

Fall. 4 credits. J. Reed.  
Introduction to Attic Greek. Designed to enable the student to read the ancient authors as soon as possible.

**CLASS 103 Attic Greek**

Spring. 4 credits. Prerequisite: 101 or equivalent. P. Pucci.  
A continuation of Classics 101.

**CLASS 104 Intensive Greek**

Summer. 6 credits. Staff.  
An intensive introduction to the fundamentals of ancient Greek grammar. Prepares students in one term for 200-level Greek.

**[CLASS 111-112 Modern Greek**

111, fall; 112, spring. 3 credits each term. Not offered 1998–99. H. Kolias.]

**CLASS 201 Attic Authors #**

Fall. 3 credits. Prerequisite: Classics 103 or 104 or equivalent. P. Pucci.  
Selected readings from Greek prose.

**CLASS 202 The Greek New Testament #**

Fall. 3 credits. Prerequisite: at least one year of ancient Greek (Classics 101–103) or permission of instructor. D. Shanzer.

Selections both from the NT (Synoptic Gospels, John, Acts, Pauline Epistles) and from other early Christian literature.

**[CLASS 203 Homer #**

Spring. 3 credits. Prerequisite: Classics 103 or 104 or equivalent. Not offered 1998–99.

Readings in the Homeric epic with emphasis on formulaic style.]

**CLASS 210 Attic Prose: Plato**

Spring. 3 credits. Prerequisite: Classics 103 or 104 or equivalent. C. Brittain.

**CLASS 225-226 Independent Study in Greek, Undergraduate Level**

225, fall; 226, spring. Up to 4 credits. Only by permission of the DUS in the case of documented schedule conflict.

**CLASS 307-308 Independent Study in Greek, Undergraduate Level**

307, fall; 308, spring. Up to 4 credits.

**CLASS 310 Greek Undergraduate Seminar #**

Fall and spring. 4 credits. Prerequisite: two 200-level courses in Greek or permission of instructor. Fall topic: Tragedy. H. Pelliccia. Spring topic: Herodotus. L. Abel.

**CLASS 311 Greek Philosophical Texts: (also Philosophy 411) #**

Fall and spring: up to 4 credits. Prerequisites: knowledge of Greek and permission of instructor. T. Irwin, C. Brittain.

Readings of Greek philosophical texts in the original.

**[CLASS 313 Greek Epic #**

Fall. 4 credits. Prerequisite: Classics 206 or equivalent. Not offered 1998–99.]

**CLASS 342 Greek Prose Composition**

Spring. 4 credits. Prerequisite: one term of 200-level or permission of instructor. P. Pucci.

**[CLASS 417 Advanced Readings in Greek #**

4 credits. Not offered 1998–99. Staff.]

**[CLASS 419 Advanced Greek Composition**

4 credits. Prerequisite: Classics 342 or equivalent. Next offered 1999–2000.]

**CLASS 555 Graduate Proseminar**

Fall. 1 credit. H. Pelliccia and staff.  
Graduate students will be introduced to the tools, techniques, and methods of classical scholarship.

**GREEK 605-606 Graduate Survey of Greek Literature**

605, fall; 606, spring. 4 credits each term. Prerequisite: linguistic proficiency to be determined by instructor. H. Pelliccia.  
A survey of Greek literature in two semesters. Classics 605: Greek literature from Homer to the mid-fifth century. Classics 606: Greek literature from the late fifth century to the Empire.

**GREEK 609-610 CORHALI Seminar**

609, fall; 610, spring. 2 credits each term. This year-long seminar will be devoted to the study of Aeschylus' tragedies. In particular we will analyze the texts' statements on the language of emotions, fear, pity, persuasion, etc. We will study the enigmatic relation that the texts establish between language and reality and the extraordinary richness of Aeschylus' diction.

**CLASS 671 Graduate Seminar in Greek: Epigraphy**

Fall. 4 credits. K. Clinton.

**CLASS 672 Graduate Seminar in Greek: Plato**

Spring. 4 credits. C. Brittain.

**CLASS 701-702 Independent Study for Graduate Students in Greek**

701, fall; 702, spring. Up to 4 credits.

**Latin****CLASS 105 Latin for Beginners**

Fall. 4 credits. Staff.  
An introductory course in the essentials of Latin, designed for rapid progress toward reading the principal Latin writers.

**CLASS 106 Elementary Latin**

Spring. 4 credits. Prerequisite: 105 or equivalent. Staff.  
A continuation of Classics 105, using readings from various authors.

**CLASS 107 Intensive Latin**

Spring and summer. 6 credits. Staff.  
Prepares students in one term for 200-level Latin.

**CLASS 108 Latin in Review**

Fall. 4 credits. Prerequisite: placement by departmental examination. E. Hohendahl.  
This course will accommodate students who place too high for beginning Latin, but not high enough for intermediate.

**CLASS 205 Intermediate Latin #**

Fall and spring. 3 credits. Prerequisite: Classics 106, 107, 108, or placement by departmental examination. D. Mankin, E. Hohendahl.  
Readings in Latin prose.

**CLASS 207 Catullus #**

Fall. 3 credits. Prerequisite: Classics 106, 107, 108, or one term of 200-level Latin. C. Brittain.

**CLASS 208 Roman Drama: Seneca #**

Spring. 3 credits. Prerequisite: Classics 106, 107, 108, or one term of 200-level Latin. J. Reed.

**CLASS 216 Vergil #**

Spring. 3 credits. Prerequisite: Classics 106, 107, 108, or one term of 200-level Latin. H. Pelliccia.

**CLASS 227-228 Independent Study in Latin, Undergraduate Level**

227, fall; 228, spring. Up to 4 credits. Only by permission of the DUS in the case of documented schedule conflict.

**CLASS 312 Latin Undergraduate Seminar: Ovid's Amores #**

Fall. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. M. Landon.

**[CLASS 314 The Augustan Age #**

4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. Not offered 1998–99.]

**CLASS 315-316 Independent Study in Latin, Undergraduate Level**

315, fall; 316, spring. Up to 4 credits.

**CLASS 317 Roman Historiography #**

Spring. 4 credits. Prerequisite: one term of 300-level Latin or permission of instructor. J. Ginsburg.

**[CLASS 338 Latin Undergraduate Seminar #**

Spring. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. Not offered fall 1998.]

**CLASS 341 Latin Prose Composition**

Fall. 4 credits. Prerequisite: one term of 200-level Latin or permission of instructor. J. Ginsburg.

**[CLASS 411 Advanced Readings in Latin Literature #**

Fall. 4 credits. Not offered fall 1998.]

**[CLASS 412 Advanced Readings in Latin Literature #**

Spring. 4 credits. Not offered spring 1999.]

**CLASS 441 Advanced Latin Prose Composition**

Fall. 4 credits. For graduate students. Only those undergraduates who have completed Latin 341 and have permission of the instructor may enroll. D. Shanzer.

**CLASS 555 Graduate Proseminar**

Fall. 1 credit. H. Pelliccia and staff. Graduate students will be introduced to the tools, techniques, and methods of Classical scholarship.

**[CLASS 603 Later Latin Literature**

Fall. 4 credits. Not offered 1998-99. D. Shanzer.]

**CLASS 679 Graduate Seminar in Latin: Epistolography**

Fall. 4 credits. J. Ginsburg.

**CLASS 680 Graduate Seminar in Latin: Catullus**

Spring. 4 credits. D. Mankin.

**CLASS 751-752 Independent Study for Graduate Students in Latin**

751, fall; 752, spring. Up to 4 credits.

**Classical Art and Archaeology****CLASS 220 Introduction to Art History: The Classical World (also History of Art 220) #**

Fall. 4 credits. J. Coleman.

An overview of the art and archaeology of the Greek and Roman world. The sculpture, vase painting, and architecture of the ancient Greeks from the Geometric period through the Hellenistic, and the art of the Romans from the early Republic to the late empire.

**CLASS 221 Minoan-Mycenaean Art and Archaeology (also Archaeology 221 and History of Art 221) #**

Spring. 3 credits. J. Coleman.

The birth of civilization in Greece and the Aegean islands during the Bronze Age. The main focus is on the rise and fall of Minoan Crete and Mycenaean Greece, with consideration given to the nature and significance of Aegean interactions with Egypt, the Near East, and Anatolia.

**[CLASS 232 Archaeology in Action I (also Archaeology 232 and History of Art 224) #**

3 credits. Prerequisite: permission of instructor. Not offered fall 1998-99. P. I. Kuniholm.]

**CLASS 233 Archaeology in Action II (also Archaeology 233 and History of Art 225) #**

Spring. 3 credits. Prerequisite: permission of instructor. P. I. Kuniholm. For description, see Art H 225.

**CLASS 309 Dendrochronology of the Aegean (also Archaeology 309 and History of Art 309)**

Fall and spring. 4 credits. Prerequisite: permission of instructor. Limited to 10 students. P. I. Kuniholm. For description, see ART H 309.

**CLASS 319 Art in the Daily Life of Greece and Rome (also History of Art 319) #**

Spring. 4 credits. A. Ramage. For description, see ART H 319.

**[CLASS 320 The Archaeology of Classical Greece (also History of Art 320) #**

4 credits. Not offered 1998-99. A. Ramage.]

**CLASS 322 Greeks and Barbarians (also History of Art 328) #**

Spring. 4 credits. Prerequisite: Classics 220 or 221, or permission of instructor. J. Coleman.

A study of the archaeological and other evidence for the interaction between Greek civilization and the peoples of the eastern and western Mediterranean from the thirteenth to the fourth centuries B.C.E. The course will focus on Greek relationships with Egypt, Phoenicia, Cyprus, Anatolia, and Italy in the post-Bronze Age period.

**[CLASS 323 Painting in the Greek and Roman World (also History of Art 323) #**

4 credits. Not offered 1998-99. A. Ramage.]

**[CLASS 325 Greek Vase Painting (also History of Art 325) #**

4 credits. Not offered 1998-99. A. Ramage.

For description, see ART H 325.]

**[CLASS 326 Greek Cities and Towns (also History of Art 326) #**

4 credits. Not offered 1998-99. J. Coleman.

Ancient Greek cities and towns from an archaeological perspective. Topics include the city in its geographical setting, the development of the fortified city, town planning, the Classical house and household, official and religious life versus private life, the territory and boundaries of cities and towns, regional states and leagues, warfare between cities and regions, and roads and sea routes. Examples will mostly be drawn from Athens/Attica and central Greece. Two short oral presentations, presented after consultation in written form, and a final examination.]

**[CLASS 327 Greek and Roman Coins (also History of Art 327) #**

4 credits. Not offered 1998-99. A. Ramage.

For description, see ART H 327.]

**[CLASS 329 Greek Sculpture (also History of Art 329) #**

4 credits. Not offered 1998-99. J. Coleman.

An examination of ancient Greek sculpture, both three-dimensional and two-dimensional, from the Archaic to the Hellenistic period. Aspects of the works studied include:

technological advances, changing ideology of the sculptors, regionalism of styles, and taste of individual patrons.]

**CLASS 350 Arts of the Roman Empire (also History of Art 322) #**

Fall. 4 credits. A. Ramage. For description, see ART H 322.

**CLASS 352 The City of Athens from Theseus to Justinian (also Archaeology 352 and History of Art 352) #**

Spring. 3 credits. M. Landon. A detailed survey of the architectural development of the city of Athens from the Bronze Age to the 6th century A. D. The principal monuments will be examined against a broad historical and cultural background, with special attention to both Athenian society and the development of Greek art and architecture as a whole.

**CLASS 357-358 Independent Study in Classical Archaeology, Undergraduate Level**

357, fall; 358, spring. Up to 4 credits.

**[CLASS 423 Ceramics (also Archaeology 423 and History of Art 423)**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. Staff.]

**[CLASS 430 Seminar on the Bronze Age Architecture of Asia Minor (also Archaeology 425 and History of Art 425) #**

4 credits. Not offered 1998-99. P. I. Kuniholm.

For description, see ART H 425.]

**[CLASS 432 Sardis and the Cities of Asia Minor (also Archaeology 432 and History of Art 424) #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. A. Ramage.

For description, see ART H 424.]

**[CLASS 434 The Rise of Classical Greece (also Archaeology 434 and History of Art 434) #**

4 credits. Recommended: Classics 220 or 221, History of Art 220 or 221, or permission of instructor. Not offered 1998-99. P. I. Kuniholm.

For description, see ART H 434.]

**[CLASS 435 Seminar on Roman Art and Archaeology (also Archaeology 435 and History of Art 427) #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. A. Ramage.

For description, see ART H 427.]

**[CLASS 629 The Prehistoric Aegean (also Archaeology 629) #**

4 credits. Not offered 1998-99; next offered 1999-2000. J. Coleman.

Seminar with focus on the Aegean and neighboring regions in the Neolithic and Early Bronze Ages.]

**[CLASS 630 Seminar in Classical Archaeology (also Archaeology 520 and History of Art 520)**

4 credits. Not offered 1998-99. P. I. Kuniholm.

For description, see ART H 520.]

**CLASS 721-722 Independent Study for Graduate Students in Classical Archaeology**

721, fall; 722, spring. Up to 4 credits.

## Greek and Latin Linguistics

**[CLASS 421 Greek Comparative Grammar (also Linguistics 451) #**  
4 credits. Prerequisite: thorough familiarity with the morphology of classical Greek. Not offered 1998–99. A. Nussbaum.

The prehistory and evolution of the sounds and forms of ancient Greek as reconstructed by comparison with the other Indo-European languages.]

**CLASS 422 Latin Comparative Grammar (also Linguistics 452) #**  
Fall. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Latin. A. Nussbaum.

The prehistory and evolution of the sounds and forms of Classical Latin as reconstructed by comparison with the other Indo-European languages.

**CLASS 424 Italic Dialects (also Linguistics 454) #**  
Fall. 4 credits. A. Nussbaum.

**[CLASS 425 Greek Dialects (also Linguistics 455) #**  
4 credits. Not offered 1998–99. A. Nussbaum.]

**[CLASS 426 Archaic Latin (also Linguistics 456) #**  
4 credits. Prerequisite: reading knowledge of Latin. Not offered 1998–99. A. Nussbaum.]

**CLASS 427 Homeric Philology (also Linguistics 457) #**  
Spring. 4 credits. Prerequisite: ability to read Homeric Greek. A. Nussbaum.  
The language of the Homeric epics: dialect background, archaisms, modernizations. The notion of a *Kunstsprache*: its constitution, use, and internal consistency. The phonological and morphological aspects of epic compositional technique.

**[CLASS 429 Mycenaean Greek (also Linguistics 459) #**  
4 credits. Prerequisite: thorough familiarity with the morphology of Classical Greek. Not offered 1998–99. A. Nussbaum.]

## Sanskrit

**[CLASS 131–132 Elementary Sanskrit (also Linguistics 131–132 and Sanskrit 131–132)**  
131, fall; 132, spring. 4 credits each term. Not offered 1998–99; next offered 1999–2000. C. Minkowski.

An introduction to the essentials of Sanskrit grammar. Designed to enable the student to read classical and epic Sanskrit as quickly as possible.]

**CLASS 251–252 Intermediate Sanskrit (also Linguistics 251–252 and Sanskrit 251–252) @ #**  
251, fall; 252, spring. 3 credits each term. Prerequisite: Classics 132 or equivalent. C. Minkowski.

Readings from the literature of Classical Sanskrit. Fall: selections from the two Sanskrit epics, the *Mahabharata* and the *Ramayana*. Spring: more selections from the epics, and from either Sanskrit story literature or from Sanskrit dramas.

**CLASS 403–404 Independent Study in Sanskrit, Undergraduate Level**  
403, fall; 404, spring. Up to 4 credits. C. Minkowski.

**CLASS 703–704 Independent Study for Graduate Students in Sanskrit**  
703, fall; 704, spring. Up to 4 credits. C. Minkowski.  
Also see Classics 291, 390, and 395 (Classical Civilization listings).

## Honors Courses

**CLASS 472 Honors Course: Senior Essay**  
Fall and spring. 8 credits. An adviser must be chosen by the end of the student's sixth semester. Topics must be approved by the Standing Committee on Honors by the beginning of the seventh semester. See "Honors," Classics front matter.

## Related Courses in Other Departments and Programs

See listings under:

Archaeology  
Asian Studies  
Comparative Literature  
English  
History  
History of Art  
Medieval Studies  
Linguistics  
Near Eastern Studies  
Philosophy  
Religious Studies  
Society for the Humanities  
Women's Studies

## COMPARATIVE LITERATURE

W. J. Kennedy, chairman (141 Goldwin Smith), C. Arroyo, director of undergraduate studies (285 Goldwin Smith); J. Monroe, director of graduate studies (145 Goldwin Smith); G. Gibian, director of the senior essay colloquium (236B Goldwin Smith, 255–8347). C.M. Arroyo, A. Caputi (Emeritus), D. Castillo, W. Cohen, J. Culler, B. deBary, D. Grossvogel (Emeritus), P. Hohendahl, W. Holdheim (Emeritus), N. Melas, N. Sakai, J. Porte, L. Waugh

Also cooperating: A. Adams, D. Bathrick, J. Bishop, R. Brann, S. Buck-Morss, P. Carden, E. Hanson, C. Kaske, D. Mankin, B. Maxwell, M. Migiel, A. R. Parker, R. Schneider, M. Steinberg, G. Waite

The Department of Comparative Literature provides a broad range of courses in European as well as non-European literatures. Courses variously stress significant authors, themes, problems, styles, genres, historical periods, and theoretical perspectives. In cooperation with related departments in the humanities, the departmental offerings reflect current interdisciplinary approaches to literary study: hermeneutics, semiotics, deconstruction, cultural criticism, Marxism, reception aesthetics, feminism, psychoanalysis.

## The Major

The major enables students to develop an integrated knowledge of Western literature, to strengthen their reading and writing abilities,

and to prepare for careers demanding analytical, interpretive, and evaluative skills. Prospective majors should consult with the director of undergraduate studies. After declaring a major, a student chooses an adviser from the department's faculty. The requirements for the major are designed to allow each student to follow a course of study that combines intellectual rigor with the pursuit of personal interests. The specific contours of such a program are worked out in consultation with the student's adviser.

## Requirements for the Major

- 1) Five courses in Comparative Literature at the 200 level and above, including the core course listed below. A student may include up to two literature courses from other departments.
- 2) One core course in Comparative Literature (for 1997–98 Comparative Literature 411 [spring]), to be taken by all majors in their junior or senior year. At the discretion of the department, students may enroll in core courses in both their junior and senior years.
- 3) Five courses in literature and other areas of the humanities at the 200 or higher level, to be taken in one or more foreign literature departments. Texts must be read in the original language. A student may offer one language course (conversation, composition, etc.) towards fulfilling the language requirement.
- 4) An honor's essay (Comparative Literature 493) of roughly fifty pages, to be written during the senior year under the direction of a faculty member, preferably from within the department, who has agreed to work in close cooperation with the student. Students are urged to begin research on their thesis topic during the summer preceding their senior year.

The department also encourages:

- 1) a program that includes broad historical coverage (e.g., Comparative Literature 201–202: Great Books); intensive study of a single genre (e.g., Comparative Literature 363–364: The European Novel, Comparative Literature 365: Contemporary Fiction); analysis of problems in literary theory (e.g., Comparative Literature 302: Literature and Theory, Comparative Literature 448: Subject to Translation). Beginning in 1998–99, the department will offer a number of strongly recommended 200-level courses designed to acquaint undergraduates with the discipline: Comparative Literature 203: "Introduction to Comparative Literature," as well as broad-ranging introductory courses in World Fiction (Comparative Literature 204) and World Poetry (Comparative Literature 205), with emphasis on the nineteenth and twentieth centuries.
- 2) a second foreign language, especially for students interested in graduate work in literature.

## Honors

A student who completes the requirements for the major is eligible for the degree of Bachelor of Arts with honors in comparative literature. The department bases its decision on the student's achieving grades of at least B+ in the senior essay and in course work for the major, and on overall academic performance at Cornell.

## Freshman Writing Seminars

Most 100-level courses may be used toward satisfying the freshman writing seminar requirements. See "John S. Knight Writing Program" for a full description of the freshman seminar program.

## Courses

### COM L 201#-202 Great Books

201, fall; 202, spring. 4 credits. Comparative Literature 201 and 202 may be taken independently of each other. COM L 202 also offered summer 1998. Fall:

W. J. Kennedy; spring: B. Maxwell.

A reading each semester of seminal texts that represent and have shaped Western culture and hence form an essential part of the student's intellectual equipment. By analyzing, interpreting, and evaluating, students will develop critical reading abilities.

**201:** Selections from the Bible. Homer, Dante, Rabelais, Shakespeare, and others.

**202:** World literature of the last 300 years, emphasizing the response to European worldwide expansion first in the colonizing countries, then in the colonized. The persistence of certain themes (such as slavery, monstrosity, overreaching, coercion, and vengeance) will be a central concern in many of the texts studied. A certain amount of attention will be given to an examination of differing ideological perspectives on the notion of "Great Books." Readings chosen from texts by Shakespeare, Defoe, Swift, Voltaire, Goethe, Mary Shelley, Balzac, Poe, Melville, Marx, Flaubert, Conrad, Kipling, Brecht, Woolf, Césaire, Tutuola, Brathwaite, Naipaul, and Ammah.

### [COM L 203 Introduction to Comparative Literature

4 credits. Not offered 1998-99. Staff.

The course is intended to answer the question persistently asked by undergraduates: "What is comparative literature, anyway?" The format of the course is designed to acquaint prospective majors, or interested undergraduates generally, with the range and variety of the field by having the members of the department take turns in presenting those aspects which reflect the areas of their expertise and their methods of teaching. Each faculty member will give a manageable reading assignment; of the two meetings each week, the first will generally take the form of a lecture; the second will be a discussion of the assigned text.]

### COM L 204 Global Fictions

Spring. 4 credits. N. Melas.

An introduction to the enormously rich field of the novel, from the astonishingly modern fiction to emerge from the medieval and post-medieval Far East to both Eurocentric and Third World Literature of the twentieth century. Translated into names, our roster would implicate people from Lady Murasaki to Vladimir Nabokov—and beyond. We shall be reading some shorter and longer fictions which have been generally considered milestones in the history of the novel and the novella, including works by Cervantes, Defoe, Austen, Flaubert, Henry James, Joyce, Kafka, and Borges and/or "essential" writers not covered in the more advanced novel courses.

### [COM L 205 Introduction to Poetry, Chiefly Modern

4 credits. Not offered 1998-99. Staff.

Unlike Comparative Literature 207, 205 is intended to be a survey that concentrates largely (but of course not exclusively) on foreign poetry. The course will cut across historical periods and poetic genres, from conventional "strict" genres of the sonnet-variety to forms more nearly associated with our own times: free verse, "the prose poem," etc. Difficult as it may be to avoid poets on the order of Shakespeare, Milton, Goethe, and Keats, we propose to focus on the practitioners of the craft from Baudelaire, Whitman, Hopkins, Mallarmé, and Rilke on down.]

### COM L 206 Introduction to Literary Criticism

Spring. 4 credits. Staff.

More advanced undergraduate seminars naturally tend to focus on contemporary literary theory; after all, it is essential for students of literature to be well-informed about contemporary theoretical debates, methodologies, and problems. But literary theory and criticism did not begin with the structuralist revolution of the 1960s, and it is also essential for students to understand earlier developments—many of which still have the power to provoke and inspire. Critical historicization should begin at home, with an awareness of how different the forms, practices, institutions and politics of literary criticism have been, and this course will thus introduce students to the vast field of pre-1960 debates. We will examine the historical evolution of key terms now more or less taken for granted as part of critical vocabulary, and we will pay particular attention to the (relatively recent) emergence of literature itself as a category of study. Critics and theorists will be chosen from among Plato, Aristotle, Cicero, Horace, and Augustine; Renaissance and neo-classical critics such as Spenser, Dryden, and Dr. Johnson; Enlightenment, Romantic and post-Romantic theorists such as Kant, Hegel, Schiller, Coleridge, Wilde, and Pater; and such major twentieth-century figures as Heidegger, Bataille, Sartre, Benjamin, Adorno, and I. A. Richards. No prior knowledge of the subject will be assumed, and all texts will be read in English.

### [COM L 208 Shakespeare and the 20th Century (also ENGL 208)

Fall. 4 credits. Not offered 1998-99.

W. Cohen.

What is the relationship between the plays of Shakespeare in their own time and the various ways they have functioned in modern culture? We will compare selected works of Shakespeare with their adaptations in fiction, theater, film, the educational system, government, and popular culture. The discussion of each play will be organized around one or more critical approaches. The course as a whole will attempt to provide a systematic introduction to the contemporary study of literature and culture.]

### COM L 215 Comparative American Literatures

Fall. 4 credits. B. Maxwell.

Twentieth-century writing from Canada, the United States, the Caribbean, and Latin America. A hemispheric American Studies perspective will encourage thinking about and across cultural, linguistic, and national demarcations. This course proposes that a question put by the poet William Carlos Williams—"History, history! What do we fools know or care?"—finds its counter-statement in words from Africa, passed on by the novelist Paule Marshall: "Once a great wrong has

been done, it never dies. People speak the words of peace, but their hearts do not forgive. Generations perform ceremonies of reconciliation but there is no end." Countering the literature of amnesia and baseless optimism, the works that we will read cannot forget, and decline to forgive, the historical traumas that so bitterly flavor them. Our concern largely will be with understanding the aesthetic means and strategies that certain writers use to perform ceremonies *not* bent on reconciliation. Readings (in English) will include Joy Kogawa, *Obasan*; Sheila Watson, *The Double Hook*; Hubert Aquin, *The Antiphony*; Jean Toomer, *Cane*; William Faulkner, *Absalom, Absalom!*; Wilson Harris, *The Palace of the Peacock*; Edward Kamau Brathwaite, *X/Self and Trench Town Rock*; Mariano Azuela, *The Underdogs*; Jose Donoso, *Curfew*; and Eduardo Galeano, *The Book of Embraces* and selections from the work of John Sanford, Rosario Castellanos, Clarice Lispector, and Juan Gelman.

### [COM L 223 The Comic Theater (also CLASS 223 and THETR 223) #

3 credits. Not offered 1998-99.

For description, see Classics 223.]

### COM L 236 Greek Mythology (also CLASS 236) #

Fall. 3 credits. Limited to 200. (Also offered summer '98). D. Mankin.

For description, see Classics 236.

### [COM L 239 Cultural History of the Jews of Spain (also NES 239, JWST 239, Rel. St. 239 and SPAN L 239)

Fall. 3 credits. Not offered 1998-99.

R. Brann.

For description, please see Near Eastern Studies 239.]

### COM L 302 Literature and Theory (also COM L 622 and ENGL 302/602)

Fall. 4 credits. J. Culler.

Study of issues in contemporary theoretical debates, with particular attention to structuralism, deconstruction, psychoanalysis, and feminism. Readings from Barthes, Derrida, Foucault, J. Butler, B. Johnson, and others. No previous knowledge of literary theory is assumed.

### COM L 304 Europe and Its Others: An Introduction to the Literature of Colonialism

Fall. 4 credits. N. Melas.

Through an examination of selected works from the literature of the nineteenth century to the modern period, mainly written in English and French, the course will explore the problems and possibilities, imperialism presented for narration, both in the literature of imperialism and the literature against imperialism. Topics will include transcultural (de)formation of identity, exoticism and internationalism, racial romance, cultural pressures on reading and interpretation, and the powers and pitfalls of writing back. Probable authors: Hagard, Stevenson, Conrad, Ngugi, Camus, Conde, Achebe, Duras, Saleh. All readings available in English.

### [COM L 305 Irony: An Introduction

Fall. 4 credits. Not offered 1998-99. Staff.

Oscar Wilde suggested that all bad poetry is sincere. Was he being ironic? Irony is an aspect of literature (and everyday life) that is very common and of fundamental importance but misunderstood and even distrusted. This course will confront the theory and politics of irony. Our approach will be historical,



philosophical, and literary but will never lose sight of practical questions that students necessarily face: must we—or can we—mean what we say? How can we analyze irony in a text? In what sense is the performance of a drag queen ironic? Texts about irony—or ironic texts—to be studied will include Plato, Kierkegaard, Swift, Flaubert, and German idealists. We will also investigate nonverbal irony in twentieth-century music from Mahler to Madonna.]

**COM L 311 Modern European Literature and Culture (also RussL 311, French 315)**

Spring. 4 credits. G. Gibian.

We shall concern ourselves with European culture as embracing the area from Russia through to the Atlantic Ocean, not as divided into Western, Eastern, or Central. European culture crosses the old East-West political boundaries. Case studies: Ireland, France, Czech Republic, Russia.

This course is designed for those interested both in the artistic, imaginative side of European literature and in the ways in which culture expresses some of the most significant concerns of our age. The conceptual links will include issues of national identity and social justice, as well as concerns of private emotions and individual personality. Popular culture, film, TV, theatre will be integrated with the reading and class discussion.

Some authors who will be read: Flaubert, Charlotte Brontë (*Villette*), Karl Marx, Dostoevsky, Mayakovsky, Yeats, Malraux, Camus, Joyce, Solzhenitsyn, Kundera, and others.

**COM L 318 Bodies Politic: Queer Theories and Literature of the Body**

Fall. 4 credits. T. Hope.

This course will examine notions of corporality—of bodies both social and individual—as deployed and analyzed in theories of gender and sexuality of the last century. How do concepts of perversion and degeneration haunt the idea of the social body? How are individual bodies stigmatized, encoded, and read within the social sphere? Sexology, psychoanalysis and new-historicist critiques, including those that emphasize the discursive intersections of sexuality, race and nationhood, will constitute our textual *corpus*; in an attempt to question the habitual dichotomization of “theoretical” and “cultural” production, we shall also include a small number of literary and visual texts which comment upon these theoretical traditions. To include works by: Sigmund Freud, Havelock Ellis, Max Nordau, André Gide, Radclyffe Hall, E. M. Forster, Luce Irigaray, Cherrie Moraga, Judith Butler, Michael Foucault, Homi Bhabha, Biddy Martin, Esther Newton, Julia Kristeva, Janine Chasseguet-Smirgel, Adrienne Rich, Leo Bersani, Richard Fung, Kobena Mercer, Jewelle Gómez, Teresa de Lauretis.

**[COM L 323 Encounters with the Dead (also ITAL L 323/623)]**

Spring. 4 credits. Not offered 1998–99. M. Migiel.

For description, please see Italian Literature 323/623.]

**COM L 326 Christianity and Judaism (also RelSt 326)**

Spring. 4 credits. C. Carmichael.

A study of the New Testament as a product of the First Century Palestinian and Hellenistic

Judaism. Other text (also in translation): Passover Haggadah.

**[COM L 328 Literature of the Old Testament (also Rel. St. 328) @ #]**

Fall. 4 credits. Not offered 1998–99. C. M. Carmichael.

Analysis of small sections of well-known material for in-depth discussion.]

**[COM L 330 Political Theory and Cinema (also GERST 330, GOVT 370 and THETR 329)]**

Fall. 4 credits. Not offered 1998–99. G. Waite.

For description, please see Theatre Arts 329.]

**[COM L 334 Muslims, Christians and Jews in Islamic Spain: Literature and Society (also NES 339/639, JWST 339, Rel. St. 334 and SPAN L 339/699) @ #]**

Spring. 4 credits. Not offered 1998–99. R. Brann.

For description, please see Near Eastern Studies 339.]

**COM L 335 The Modern and Contemporary Theatre (also THETR 335)**

Fall. 4 credits. R. Schneider.

For course description, please see THETR 335.

**[COM L 336 European Drama 1660–1900: Molière to Ibsen (also ENGL 335 and THETR 333) #]**

Spring. 4 credits. Not offered 1998–99. A. R. Parker.

Major works by such writers as Molière, Congreve, Goethe, Schiller, Kleist, Shelley, Byron, Büchner, Ibsen, and Chekhov. Attention to influential theater traditions (commedia dell'arte, melodrama, pantomime); theories and styles of acting (Diderot, Garrick, Kean); the role of theater in the cultural politics of Enlightenment and Revolutionary Europe (Rousseau, Burke).]

**[COM L 343 Contemporary Mass Culture in Japan and in the U.S. (also Asian St 363)]**

Spring. 4 credits. Enrollment limited to 25. Not offered 1998–99. B. deBary.

For description, please see Asian Studies 363.]

**[COM L 352 European Cultural History, 1750–1870 (also HIST 362) #]**

Spring. 4 credits. Not offered 1998–99. M. Steinberg.

For description, please see History 362.]

**COM L 353 European Cultural History (also Hist 363)**

Fall. 4 credits. M. Steinberg.

For course description, please see History 363.

**[COM L 355 Decadence (also ENGL 355 and WOMNS 355)]**

Fall. 4 credits. Not offered 1998–99. E. Hanson.

For description, please see English 355.]

**COM L 356 Renaissance Literature**

Spring. 4 credits. W. Kennedy.

An introduction to Renaissance literary texts with some attention to cultural backgrounds and intellectual history. Readings from Machiavelli, Erasmus, Rabelais, Shak, Cervantes and others.

**COM L 358 Literature and Religion: Western Mysticism (also RomS 358, Rel. St. 358)**

Spring. 4 credits. C. Arroyo.

Analysis of some canonical texts of western mysticism toward a systematic view of their

common features (a semiotics of the mystic text). Readings include: excerpts from the Bible, Plotinus, Pseudodionysius, Bernard of Clairvaux, Ibn Arabi of Murcia, The Zohar, Meister Eckhart, Teresa of Avila, John of the Cross, and expressions of silence and the ineffable in our times.

**[COM L 362 The Culture of the Renaissance II (also ENGL 325, HIST 364, MUS 390, ART H 351 and Rel. St. 362) #]**

Fall. 4 credits. Not offered 1998–99. C. Kaske, W. J. Kennedy.

Members of various departments will lecture on Luther, Michelangelo, Edmund Spenser, Cervantes, Copernicus, Galileo, and Monteverdi. Guest lectures will include Peter Dear, History; Esther Dotson, History of Art; and Rebecca Harris-Warrick, Music. Lectures and discussion will introduce different methods of interpretation and of historical analysis. Written requirements: two short papers and a final take-home examination.]

**COM L 363#–364 The European Novel**

363, fall; 364, spring. 4 credits. Comparative Literature 363 and 364 may be taken independently of each other. Fall: C. M. Arroyo. Spring: E. Rosenberg.

**363: From Boccaccio to Goethe.** Survey of the history of the novel from its origins to the end of the eighteenth century. The new genre of Humanism and the medieval romances of chivalry. Ambiguities derived from the lack of the word “novel.” Different steps in the conquest of realism. The novel and intellectual history in different epochs: character and structure in the novels and contemporary philosophical views on man, cosmos, gender, and social classes. Readings include Boccaccio's *Fiammetta*; G. Pérez's *Lazarillo de Tormes*; Cervantes's *Don Quixote*; Mme de Lafayette's *The Princess of Cleves*; Defoe's *Robinson Crusoe*; Horace Walpole's *The Castle of Otranto*; and Goethe's *The Sorrows of Young Werther*, as well as a short package containing theoretical statements about the genre from Giraldo Cinthio to Goethe. All texts read in English.

**364: From Stendhal to the present** (in translation). Close reading of novels from the 19th and 20th centuries: Stendhal's *The Red and the Black*; Flaubert's *Madame Bovary*; Dostoevsky's *Crime and Punishment*; Joyce's *Portrait of the Artist as a Young Man*; Kafka's *The Metamorphosis*; and Kundera's *The Unbearable Lightness of Being*. Study of the changing ways of representing recurring themes: the role of the creative imagination; the city and country; rebellions and revolutions; communities and solidarity; dominant groups and minorities (social, ethnic, religious, psychological); interplay of politics, sex, and humor. Artistic and structural developments: coherence, connectedness, fragmentation; from realism to modernism.

**[COM L 365 Contemporary Fiction]**

Fall. 4 credits. Not offered 1998–99. B. Maxwell.

A study of European fiction and drama largely drawing on texts from the first half of the twentieth century. We will pay particular attention to the making of literary types and characters; to traces of utopian and messianic elements; to the relations between memory and political revolution; and to the motive of *ressentiment*. Readings (in translation) chosen from the following: Robert Walser, *Snowwhite* and *The Walk*; Franz Kafka, *The Trial*;

Thomas Mann, *Death in Venice*; Bertolt Brecht, *The Rise and Fall of the City of Mahagonny*; Joseph Roth, *Hotel Savoy*; Alfred Döblin, *Berlin Alexanderplatz*; Christa Wolf, *The Quest for Christa T.*; Louis Aragon, *Paris Peasant*; Louis-Ferdinand Céline, *Death on the Installment Plan*; Elio Vittorini, *In Sicily*; Natalia Ginzburg, stories; and Isaac Babel, stories. Collateral theoretical readings by Georg Lukács, Ernst Bloch, Bertolt Brecht, Walter Benjamin, Siegfried Kracauer, Gershom Scholem, Elias Canetti, and Christa Wolf.]

**COM L 367 The Russian Novel (also RUSS L 367) #**

Fall. 4 credits. G. Gibian.

For description, please see Russian Literature 367.

**[COM L 368 Visual Culture and Social Theory (also GOVT 375 and ART H 370)]**

Fall. 4 credits. Not offered 1998-99.

S. Buck-Morss.

For description, please see Government 375.]

**COM L 375 Chekhov (also RUSS L 373)**

Fall. 4 credits. S. Senderovich.

For course description, please see Russian Literature 373.

**COM L 385 Reading Nabokov (also RUSS L 385, ENGL 379)**

Fall. 4 credits. Enrollments limited to 25. G. Shapiro.

For course description, please see Russian Literature 385.

**[COM L 387 Interpretation and/as Violence]**

Spring. 4 credits. Not offered 1998-99. Staff.

This course is a response to the approach of the millennium and the increase of violence that seems destined to accompany it. The working hypothesis of the course is that reading should be a process of radical patience which resists the millenarian drive towards apocalypse, and that 'reading' should be distinguished from 'interpretation.' The course will introduce students to the history and theory of interpretation and will show how it has implied a certain kind of violence at least since the beginnings of Christianity. We will begin by exploring how the New Testament comes into being as a more or less violent interpretation of Jewish scriptures, and how Christianity sets up a strong interpretative regime that continues to exert its power today. Given that the ethics of interpretation is becoming increasingly urgent, we will focus on how literary interpretation becomes institutionalized in order to rethink what happens when a reader meets a text. Particular attention will be given to developments in nineteenth-century Germany, where theological categories gradually became secularized as part of the founding process of the modern university.]

**COM L 389 Contemporary Literature in Central and E. Europe (also RUSS L 389)**

Fall. 4 credits. G. Gibian.

For course description, please see Russian Literature 389.

**COM L 394 Trans-Atlantic Renaissance (also ROM S 394)**

Spring. 4 credits. J. Piedra.

For course description, please see Romance Studies 394.

**[COM L 395 Fin de Siècle or Belle Epoque?: Parisian Culture Around 1900 (also FRLIT 393)]**

Spring. 4 credits. Not offered 1998-99. Staff.

Focusing on Parisian culture between 1880 and 1914, a period in which artists and intellectuals confronted a startling new world wrought by industrial production, urban concentration, and political reorganization, this course will consider the relationship between decadence and modernity, with special attention to sexuality and the subject of modernity in the Belle Epoque. Themes to be considered will include: 1) theories of pathology, decadence, and difference; 2) city spectacle and mass entertainment; 3) the retreat to the interior as a site of psychological exploration and artistic innovation; 4) feminine culture and the New Woman; 5) spaces of the demimonde (the culture of courtesans, sapphism 1900); 6) identity and technological innovation. Short critical texts will be read in relation to well-known authors of the period such as Max Nordau, Zola, Huysmans, Rachilde, Colette, and Proust. Requirements will include short oral presentations and a term paper.]

**[COM L 396 German Film (also GERST 396 and THETR 396)]**

Spring. 4 credits. Requirements: participation in class discussion, one paper, midterm, and final. Not offered 1998-99. D. Bathrick.

For description, please see Theatre Arts 396.]

**COM L 400 History and Memory: Virtual Nations, Artificial Groups and the Historical Event (also SOC HUM 406 and NES 490)**

Fall. 4 credits. Enrollments limited to 15. R. Khanna.

For course description, please see Society for Humanities 406.

**[COM L 404 History into Fiction: Nazis and the Literary Imagination (also ENGL 404 and GERST 414)]**

Fall. 4 credits. Not offered 1998-99. E. Rosenberg.

For description, see ENGL 404.]

**COM L 408 Gilles Deleuze and the Philosophy of the Virtual (also SOC HUM 417)**

Spring. 4 credits. Enrollments limited to 15. E. Kaufman.

For course description, please see Society for Humanities 417.

**COM L 409 Genius and Madness in German Literature (also GER ST 428)**

Fall. 4 credits. A. Schwarz.

For course description, please see GER ST 428.

**[COM L 410 Semiotics and Language (also LING 400 and Fr Rom St 400)]**

Spring. 4 credits. Prerequisite: some background in an area relevant to semiotics: e.g., linguistics, philosophy, psychology, anthropology, or literature; or permission of instructor. Not offered 1998-99. L. Waugh.

For description, please see Linguistics 400.]

**[COM L 411 The Short Novel from Flaubert and James to the Present]**

Spring. 4 credits. Enrollment limited. Not offered 1998-99. E. Rosenberg.

Discussion of some ten authors who excelled in the form of the novella and whose names are thus up to a point "given": in addition to

James and Flaubert, writers like Conrad, Tolstoy, Mann, Kafka, Joyce, Faulkner, Marquez, Morrison. One novella each week or week and a half, but not in canonical order; e.g., Conrad's *Heart of Darkness*, Kafka's *Penal Colony*, and Ozick's *The Shawl* as versions of modern politics (or atrocities); the question of "status" as this is reflected in the relations between employer and domestic in things like Flaubert's *Simple Heart*, Tolstoy's *Master and Man*, and Gertrude Stein's *The Good Anna*; versions of the *récit*—specifically on the conditions of marriage—in Tolstoy's *Kreutzer Sonata* and (to stick with Beethoven) André Gide's *Pastoral Symphony*; same-sex relations in James's *Pupil* and Mann's *Death in Venice*; then also varieties of the fantastic in, say, *Jekyll and Hyde*, *Turn of the Screw*, Dostoevski's *Double*.]

**[COM L 413 Death, Culture and the Literary Monument]**

Fall. 4 credits. Not offered 1998-99. N. Melas.

Beginning with Homer's *Iliad*, this course will inquire into the monumental transformation of death into immortality in the literary composition. How do death's negations become fiction's triumph? We will pay particular attention to the fate of this procedure when its subjects are no longer heroic warriors but slaves and women. How do colonial domination and gender difference alter the aesthetic procedures and assumptions underlying commemoration and literary immortality? In addition to death and language, we will consider such themes as the relation of antiquity to the present, of identity to its dissolution and of politics to culture. Readings of literary texts drawn from a variety of languages and traditions will be attended by selected readings in critical theory and a glance at visual culture, particularly surrounding monuments commemorating the emancipation of slaves and the holocaust. Authors will include Homer, Derek Walcott, Simone Schwartz-Bart, Virginia Woolf, Krista Wolf, Tayeb Salih, Maurice Blanchot, Hegel, Orlando Patterson, Walter Benjamin.]

**COM L 417 Faust (also GER ST 417)**

Fall. 4 credits. H. Deinert.

For course description, please see German Studies 417.

**COM L 419-420 Independent Study**

419, fall; 420, spring. Variable credit. Comparative Literature 419 and 420 may be taken independently of each other. Applications available in 145 G.S.

**COM L 421 Approaches to Discourse (also LANG 420)**

Spring. 4 credits. H. Tao.

For course description, please see LANG 420.

**COM L 424 Early Modern Paradise (also SOC HUM 404)**

Spring. 4 credits. Enrollments limited to 15. M. Doueih.

For course description, please see Society for Humanities 404.

**COM L 425 Marx, Freud, Nietzsche (also GER ST 415, GOVT 473)**

Spring. 4 credits. G. Waite.

For course description, please see German Studies 415.

**COM L 426 New Testament Seminar  
(also REL ST 426)**

Spring. 4 credits. Enrollment is limited to 20 students. C. Carmichael.

Identification and discussion of problems in the New Testament.

**COM L 429 Readings in the New Testament (also NES 429, REL ST 429 and ENGL 429)**

Fall. 4 credits. Limited to 30 students.

J. P. Bishop.

Close readings of representative texts from the New Testament in modern scholarly editions, with the help of appropriate introductory and specialized commentary. The focus for 1997 will be on Acts and the letters of Paul. All readings will be in English, but repeated reference to the Greek original will be made. Graduate students and undergraduates from other colleges who are interested in the material should not feel inhibited from enrolling. The approach will be primarily exegetical; that is, we will try to find out what the texts say and what they mean by what they say. Thus we can hope to stay open to scholarly and religious issues alike.

**[COM L 440 Semiotics and Texts (also LANG 435)]**

4 credits. Not offered 1998–99. To be offered fall 1999 and spring 2000. Staff. For course description, please see LANG 435.]

**COM L 445 Nabokov vs. Sartre (also RUSS L 425)**

Spring. 4 credits. S. Senderovich.

For course description, please see Russian Literature 425.

**COM L 449 Misogyny and Its Readers (also COM L 649, ITAL L 409/609, WM ST 409/609)**

Fall. 4 credits. M. Migiel.

For course description, please see Italian Literature 409.

**COM L 452 Renaissance Humanism (also COM L 652)**

Spring. 4 credits. Enrollment limited to 15. W. Kennedy.

A reading and discussion of key texts by Renaissance humanists in Italian, French, English and other European literatures from the fourteenth to seventeenth centuries.

**COM L 455 Caribbean Literature (also AFRICANA ST 455)**

Fall. 4 credits. Enrollment limited to 15. A. Adams.

For description, please see Africana Studies 455.

**[COM L 456 Boccaccio: Gender, Power, and the Medieval Text (also ITAL L 445/645 and WOMNS 448/648)]**

Fall. 4 credits. Not offered 1998–99. M. Migiel.

For description, please see Italian Literature 445/645.]

**COM L 463 Decadence, Degeneration and the 19th-Century Imaginary**

Spring. 4 credits. T. Hope.

Through critical reading of French, British and German prose fiction as well as examples of medical, anthropological and philosophical thought, we shall examine the social significance of discourses of disease, decadence and degeneration from the late eighteenth century to the early twentieth. How are questions of bodily pathology related to the construction of "national" bodies? How does perversion emerge at the core of theories

of heredity and genealogy that traverse Europe's colonial scenes? What is the relationship between symptoms and texts, between sickness and subversion, in the mapping of gender, class, race and sexuality onto the body? The course material will include readings from Jean-Jacques Rousseau, Alexandre Dumas  *fils*, Edgar Allan Poe, Honoré de Balzac, Arthur Schopenhauer, Friedrich Nietzsche, Sigmund Freud, Remy de Gourmont, Havelock Ellis, Radclyffe Hall and Thomas Mann. Students may read in the original language or in translation.

**COM L 472 Poetry of the 1990s (also ENGL 408, SPAN L 472, and GER ST 472)**

Fall. 4 credits. Enrollment limited to 15 students. J. Monroe.

Where is poetry now? Where is it heading as we move toward the twenty-first century? What is its current situation in light of the historic changes that have occurred since 1989? Exploring how contemporary poetry is responding to a new era of altered expectations and redrawn boundaries, a time of renewal and redefinition, we will track the principal issues, directions, figures, and forces shaping the process of poetry's unfolding in the twentieth century's final decade. Materials will be drawn from a wide variety of forms and contexts, including movies, literary journals, general circulation magazines, and anthologies, as well as individual poetry collections.

**COM L 481 Baudelaire in Context (also COM L 680)**

Spring. 4 credits. J. Culler.

A study of *Les Fleurs du Mal* in the context of various nineteenth- and twentieth-century discourses: The Romantic lyric (Hugo, Lamartine, Desbordes-Valmore), romantic satanism, debates about prostitution, and twentieth-century accounts of Baudelaire as the founder of modern poetry or the poet of the city.

**COM L 493 Senior Essay**

Fall and spring. 8 credits.

Hours to be arranged individually in consultation with the director of the Senior Essay Colloquium. Approximately fifty pages to be written over the course of two semesters in the student's senior year under the direction of the student's adviser. An "R" grade will be assigned on the basis of research and a preliminary draft completed in the first semester. A letter grade will be awarded on completion of the second semester.

**[COM L 604 Translation and the Global Marketplace]**

Fall. 4 credits. Not offered 1998–99. Staff.

The seminar will investigate the global politics of translation, focusing on how works are picked up (or not) for international circulation. Issues to be examined will include: how the politics of local censorship restrict or enable visibility; how the problem of cultural essentialism is packaged and marketed transnationally; how cultural and national identity come through (or not) in translation; how experiments in non-standard English (ebonics, cubonics, créolité, drug argot, and class slang) disturb or reaffirm linguistic identity politics. In addition to critical texts, the course will engage with textual studies of Ken Saro-wiwa's *Sozaboy: A Novel Written in Rotten English*, Salmon Rushdie's *The Satanic Verses*, Theresa Hak Cha's *Dictée*,

Patrick Chamoiseau's *Texaco*, Irvine Welsh's *Trainspotting*, and Gustavo Perez Firmat's *Life on the Hyphen*. The final section of the seminar will be devoted to exploring ways in which a growing number of non-western writers have begun to break out of traditionalist narrative modes in order to "translate" the effects of new media on literary representation, from Afro-futurism to postcolonial cyberpunk.]

**[COM L 609 Comparison and Cultural Difference]**

Fall. 4 credits. Not offered 1998–99. N. Melas.

This course will be a wide-ranging investigation of the pitfalls and possibilities for cross-cultural comparison. We will examine the structure and mechanisms of comparison, both as a disciplinary method and as a concept or practice: to what extent and in what circumstance can comparison produce cultural difference, consolidate it, dissolve it, erect borders, inhabit borderlands, propose a global ecumene? With particular attention to colonialism and globalization, we will inquire into the relation between various modes of comparison and broader contexts and ideologies. Though focused on the humanities and on theoretical texts, readings will include incursions into the social sciences and selected poetry and film. Authors may include Lyotard, Foucault, Fanon, Tilley, Gilroy, Clifford, Appadurai, Bhabha, Lanser, Kincaid, Walcott.]

**COM L 619–620 Independent Study**

619, fall; 620, spring. Variable credit.

Comparative Literature 619 and 620 may be taken independently of each other. Applications available in 145 G.S.

**COM L 622 Literature and Theory (also Com L 302 and ENGL 302/602)**

Fall. 4 credits. J. Culler.

For description, please see Comparative Literature 302.

**[COM L 626 Baroque (also GER ST 627)]**

Fall. 4 credits. Not offered 1998–99.

G. Waite.

For description, please see German Studies 627.]

**[COM L 641 Bakhtin as Reader (also RUSS L 641)]**

Spring. 4 credits. Also open to undergraduates with permission of instructor. Not offered 1998–99. P. Carden.

For description, please see Russian Literature 641.]

**COM L 649 Misogyny and Its Readers (also COM L 449, ITAL L 409/609, WM ST 409/609)**

Fall. 4 credits. M. Migiel.

For course description, please see Italian Literature 409.

**COM L 652 Renaissance Humanism (also COM L 452)**

Spring. 4 credits. W. Kennedy.

**COM L 656 Aesthetic Theory: The End of Art (also GER ST 656)**

Spring. 4 credits. P. Gilgen.

For course description, please see German Studies 656.

**[COM L 657 Seminar in Dramatic Theory (also THETR 637)]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
R. Schneider.

For description, please see Theatre Arts 637.]

**COM L 664 Literature and the Uncanny (also GER ST 668)**

Fall. 4 credits. A. Schwarz.

For course description, please see German Studies 656.

**COM L 671 Transnational Imaginaries: Globalization and Culture**

Fall. 4 credits. N. Melas.

The term "globalization" has become ubiquitous in recent years as the primary conceptual frame and material basis for understanding contemporary transnationalism. It evokes a brave new borderless world in which politics, culture, and social formations are no longer necessarily congruent nor primarily beholden to national boundaries thus making neocolonial domination easier to see and harder to combat. It triumphantly or despairingly announces the end of history when space precedes time as the measure of human experience, and that experience exceeds the grasp of aspects of our understanding of culture—both in its ethnographic and humanist guises—and of the categories through which we apprehend and analyze it. The question of the mutation of culture in globalization is most often framed either in terms of the prospects for global culture and its inverse, a regeneration of resistant and hybrid localism, or in terms of the global reach of chiefly U.S. popular culture through the media.

While considering these issues, this seminar will focus on how globality is represented, or rather imagined, particularly in cultural texts (chiefly theory, literature, and film) marginal to the centers of power. In addition to providing a critical survey of some of the most influential texts and debates on the subject of globalization, this seminar will also attempt a re-evaluation (not to say a rehabilitation) of the notion of "imagination" and the pivotal if often covert role it plays in claims for cultural resistance. Authors may include Amin, Wallerstein, Hall, Myoshi, Harvey, Robertson, Appadurai, Agamben, Walcott, Brennan, Jameson, Glissant, Mies.

**COM L 674 Contemporary Poetry and Culture: 1968-1998 (also ENGL 697 and GERST 674)**

Spring. 4 credits. J. Monroe.

The redrawing of cultural and political boundaries underway since the late 1980's has made it possible to conceive of the poetry of the Cold War era with a degree of closure unimaginable only a few years ago. In light of this changed situation, we will focus on the second half of the post-1945 period—the thirty years extending from 1968 to the present—with particular attention to the past two decades. Exploring issues of emerging and evolving importance for a poetry of the present moment in light of the recent past, we will consider dominant modes as well as alternative practices; canon formation, gender, and multiculturalism; the roles of the publishing industry, popular culture, creative writing programs, and new computer technologies in shaping reading habits and writing communities.

**[COM L 675 After the Divide: German Critical Theory of the Seventies and Eighties (also GERST 675 and HIST 675)]**

Fall. 4 credits. Not offered 1998-99.  
P. Hohendahl.

For description, please see German Studies 675.]

**COM L 680 Baudelaire in Context (also COM L 481)**

Spring. 4 credits. J. Culler.

For course description, please see Comparative Literature 481.

**COM L 686 Althusser and Lacan (also GER ST 686, FR LIT 623)**

Spring. 4 credits. Enrollment limited to 12. G. Waite.

For course description, please see German Studies 686.

**COM L 689 Adorno's Aesthetic Theory (also GER ST 689)**

Fall. 4 credits. P. Hohendahl.

For course description, please see German Studies 689.

**[COM L 699 German Film Theory (also GERST 699 and THETR 699)]**

Fall. 4 credits. Not offered 1998-99.  
D. Bathrick.

For description, please see Theatre Arts 699.]

**COMPUTER SCIENCE**

R. L. Constable, chair; K. Birman, C. Cardie, T. Coleman, R. Elber, D. Gries, J. Halpern, J. Hartmanis, J. E. Hopcroft, D. Huttenlocher, S. Keshav, J. Kleinberg, D. Kozen, L. Lee, G. Morrisett, K. Pingali, R. A. Rubinfeld, F. B. Schneider, B. Selman, P. Seshadri, B. Smith, E. Tardos, R. Teitelbaum, S. Toueg, C. Van Loan, S. Vavasis, T. vonEicken, R. Zabih

The Department of Computer Science is affiliated with both the College of Arts and Sciences and the College of Engineering. Students in either college may major in computer science. For details, visit our World Wide Web site at <http://www.cs.cornell.edu/Info/Ugrad>

**The Major**

CS majors take courses in algorithms, data structures, logic, programming languages, scientific computing, systems, and theory. Electives in artificial intelligence, computer graphics, computer vision, databases, multimedia, and networks are also possible. Requirements include:

- four semesters of calculus (MATH 111-122 (or 112)-221-222 or 191-192-293-294)
- two semesters of introductory computer programming (COM S 100 and 211 or 212)
- a seven-course computer science core (COM S 222, 280, 314, 381, 410, 414, and 482)
- two 400+ computer science electives, totaling at least 6 credits
- a computer science project course (COM S 413, 415, 418, 433, or 473)
- a 3+ credit mathematical elective course (OR&IE 270, MATH 300+, T&AM 300+, etc.)

- two 300+ courses that are technical in nature and total at least six credits
- a three course specialization in a discipline other than computer science. These courses must be numbered 300-level or greater and total at least nine credits.

The program is broad and rigorous, but it is structured in a way that supports in-depth study of outside areas. Intelligent course selection can set the stage for graduate study and employment in any technical area and any professional area such as business, law, or medicine. With the advisor, the computer science major is expected to put together a coherent program of study that supports career objectives, and is true to the aims of liberal education.

**Admission**

The prerequisites for admission to the major are:

- 1) Completion of Computer Science 100-211 (or 212)-280
- 2) Completion of Mathematics 111-122-221 or Mathematics 191-192-293
- 3) A 2.75 grade-point average in all computer science and mathematics courses
- 4) Acceptance by the department's admissions committee

After admission, students are expected to maintain at least a 2.75 grade-point average in their major courses. Any grade below C- in a core course or related elective is not acceptable.

**Honors.** To qualify for departmental honors a student must have:

- maintained a cumulative GPA >= 3.5
- completed 8 credit hours of COM S course work at or above the 500 level
- completed 6 credit hours of COM S 490 research with a COM S faculty member, spread over at least two semesters and obtaining grades of A- or better.

Note: Honors courses may not be used to satisfy the COM S 400+ elective requirement, the COM S project requirement, the math or technical electives, or the minor. See the COM S undergraduate website for more information on eligibility: <http://www.cs.cornell.edu/Ugrad>.

**Courses**

For complete course descriptions, see the computer science listing in the College of Engineering section.

**COM S 099 Fundamental Programming Concepts**

Fall, summer. 2 credits. S-U grades only. No prerequisites.

**COM S 100 Introduction to Computer Programming**

Fall, spring, or summer. 4 credits.

During the fall semester, two versions of COM S 100 (COM S 100a and COM S 100b) are available as described in the computer science listing in the College of Engineering.

**COM S 101 Introduction to Cognitive Science (also COGST 101, LING 170, and PSYCH 102)**

Fall. 3 credits.



**COM S 113 Introduction to C**

Fall, spring. 1 credit. Weeks 5–8.  
Prerequisite: COM S 100 or equivalent programming experience. Credit is granted for both COMS 113 and 213 only if 113 is taken first. S–U grades only.

**COM S 114 Unix Tools**

Fall, spring. 1 credit. Weeks 1–4.  
Prerequisite: COM S 100 or equivalent programming experience. S–U grades only.

**COM S 130 Creating Web Documents**

Fall. 3 credits.

**COM S 201 Cognitive Science in Context Laboratory: Explorations of Cognitive Science in Ecological Settings (also COGST 201 and PSYCH 201)**

Fall. 4 credits. Prerequisite: Introduction to Cognitive Science PSYCH 102, COGST 101, COM S 101, or written permission of the instructor. Limited to 24 students. Disc and demos, M W 10:10; lab, M or W 1:25–4:25, plus additional hours to be arranged. B. Halpern and staff.

**COM S 202 Transition to Java**

Fall, spring. 1 credit. Weeks 1–4.  
Prerequisites: COM S 100; COM S 212 recommended.

**COM S 211 Computers and Programming (also ENGRD 211)**

Fall, spring, or summer. 3 credits.  
Prerequisite: COM S 100 or equivalent programming experience. Credit will not be granted for both COM S 211 and 212.

**COM S 212 Structure and Interpretation of Computer Programs (also ENGRD 212)**

Fall, spring. 4 credits. Prerequisite: COM S 100 or equivalent programming experience. Credit will not be granted for both COM S 211 and 212.

**COM S 213 C++ Programming**

Fall, spring. 2 credits. Prerequisite: COM S 211 or 212 or equivalent programming experience. Students who plan to take COMS 113 and 213 must take 113 first. S–U grades only.

**COM S 222 Introduction to Scientific Computation (also ENGRD 222)**

Spring, summer. 3 credits. Prerequisites: COM S 100 and (MATH 222 or MATH 294).

**COM S 280 Discrete Structures**

Fall or spring. 4 credits. Prerequisite: COM S 211 or 212 or permission of instructor.

**COM S 314 Introduction to Digital Systems and Computer Organization**

Fall, spring. 4 credits. Prerequisite: COM S 211 or 212, or equivalent.

**COM S 381 Introduction to Theory of Computing**

Fall, summer. 4 credits. Prerequisite: COM S 280 or permission of instructor.

**[COM S 400 The Science of Programming**

Spring. 4 credits. Prerequisite: COM S 280 or equivalent. Not offered every year; semester to be announced.]

**COM S 410 Data Structures**

Fall, spring, summer. 4 credits. Prerequisite: COM S 280 or permission of instructor.

**[COM S 411 Programming Languages and Logics**

Fall. 4 credits. Prerequisites: COM S 410 or permission of instructor. Not offered every year; semester to be announced.]

**COM S 412 Introduction to Compilers and Translators**

Spring. 3 credits. Prerequisites: COM S 314, 381, and 410. Corequisite: COM S 413.

**COM S 413 Practicum in Compilers and Translators**

Spring. 2 credits. Prerequisites: COM S 314, 381, 410. Corequisite: COM S 412. A compiler implementation project related to COM S 412.

**COM S 414 Systems Programming and Operating Systems**

Fall, summer. 3 credits. Prerequisite: COM S 314 or permission of instructor.

**COM S 415 Practicum in Operating Systems**

Fall. 2 credits. Prerequisite: COM S 410. Corequisite: COM S 414.

**COM S 417 Computer Graphics and Visualization (also ARCH 374)**

Spring. 3 credits. Prerequisite: COM S 211 or 212.

**COM S 418 Practicum in Computer Graphics (also ARCH 375)**

Spring. 2 credits. Enrollment limited. Permission of instructor. Prerequisite: COM S 211 or 212. Recommended: COM S 314. Corequisite: COM S 417.

**COM S 421 Numerical Analysis**

Fall. 4 credits. Prerequisites: MATH 294 or equivalent, one additional mathematics course numbered 300 or above, and knowledge of programming.

**COM S 432 Introduction To Database Systems**

Fall. 3 credits. Prerequisites: COM S 211 or 212 and COM S 410. Recommended: COM S 213 and strong programming skills in C, C++, or Java.

**COM S 433 Practicum in Database Systems**

Fall. 2 credits. Corequisite: COM S 432.

**COM S 444 Distributed Systems and Algorithms**

Fall. 4 credits. Prerequisite/co-requisite: COM S 414 or permission of instructor. Not offered every year; next offered fall 1999.

**COM S 472 Foundations of Artificial Intelligence**

Fall. 3 credits. Prerequisites: COM S 211 or 212, and COM S 280 or equivalent.

**COM S 473 Practicum in Artificial Intelligence**

Fall. 2 credits. Prerequisites: COM S 211 or 212, and COM S 280 or equivalent. Corequisite: COM S 472.

**COM S 481 Introduction to Theory of Computing**

Fall. 4 credits. Prerequisite: COM S 280 or permission of instructor. Credit will not be granted for both COM S 381 and 481. A faster-moving and deeper version of COM S 381. Corrective transfers between COM S 481 and 381 (in either direction) are encouraged during the first few weeks of instruction.

**COM S 482 Introduction to Analysis of Algorithms**

Spring, summer. 4 credits. Prerequisites: COM S 410 and COM S 381 or 481, or permission of instructor.

**COM S 486 Applied Logic (also MATH 486)**

Fall or spring. 4 credits. Prerequisites: MATH 222 or 294, COM S 280 or equivalent (such as MATH 332, 432, 434, 481), and some course in mathematics or theoretical computer science.

**COM S 490 Independent Reading and Research**

Fall or spring. 1–4 credits.

**COM S 501 Software Engineering: Technology and Technique**

Fall. 4 credits. Prerequisite: COM S 410 and knowledge of the C programming language.

**COM S 514 Intermediate Computer Systems**

Fall or spring. 4 credits. Prerequisites: COM S 414 or permission of instructor.

**COM S 515 Practicum in Systems**

Fall or spring. 1–2 credits. Co-requisite: COM S 514.

**COM S 516 High-Performance Computer Architecture**

Spring. 4 credits. Prerequisite: COM S 314 required; COM S 412 or 414 highly recommended. Not offered every year; semester to be announced.

**COM S 519 Engineering Computer Networks**

Fall. 4 credits. Prerequisites: COM S 214, 314, and 410, or permission of instructor.

**[COM S 522 Computational Tools and Methods for Finance**

Spring. 4 credits. Prerequisites: programming experience (C or FORTRAN), MATLAB, some knowledge of numerical methods, especially numerical linear algebra. Not offered spring 1999. NBA 555 is a suitable alternative.]

**COM S 601 System Concepts**

Fall. 3 credits. Prerequisite: open to students enrolled in the COM S Ph.D. program.

**COM S 611 Advanced Programming Languages**

Fall. 4 credits. Prerequisites: graduate standing or permission of instructor.

**COM S 612 Compiler Design for High-Performance Architectures**

Spring. 4 credits. Prerequisites: COM S 314 and 412, or permission of instructor.

**COM S 613 Concurrent Programming**

Spring. 4 credits. Prerequisites: COM S 414 or permission of instructor. Not offered every year; semester to be announced.

**COM S 614 Advanced Systems**

Spring. 4 credits. Prerequisite: COM S 414 or permission of instructor.

**[COM S 618 Principles of Distributed Computing-Message Passing**

Spring. 4 credits. Prerequisites: mathematical maturity and some basic knowledge of distributed systems. Offered in even-numbered years.]

**COM S 619 Principles of Distributed Computing-Shared Memory**

Spring. 4 credits. Prerequisites: mathematical maturity and some basic knowledge of distributed systems. Offered in odd-numbered years.

**COM S 621 Matrix Computations**

Fall. 4 credits. Prerequisites: MATH 411 and 431 or permission of instructor.

**COM S 622 Numerical Optimization and Nonlinear Algebraic Equations**

Spring. 4 credits. Prerequisite: COM S 621. Offered in odd-numbered years.

**[COM S 624 Numerical Solution of Differential Equations]**

Spring. 4 credits. Prerequisite: previous exposure to numerical analysis, mathematical analysis including Fourier methods, and differential equations. Offered in even-numbered years.]

**COM S 626 Computational Molecular Biology**

Spring. 4 credits. Prerequisites: familiarity with linear programming, numerical solutions of ordinary differential equations and non-linear optimization methods.

**COM S 631 Multimedia Systems**

Spring. 4 credits. Prerequisite: COM S 414 or permission of instructor.

**COM S 632 Advanced Database Systems**

Spring. 4 credits. Prerequisite: COM S 432/433 or permission of instructor.

**COM S 664 Machine Vision**

Spring. 4 credits. Prerequisites: undergraduate-level understanding of algorithms and Mathematics 221 or equivalent.

**COM S 671 Introduction to Automated Reasoning**

Fall. 4 credits. Prerequisite: graduate standing and COM S 611 or permission of instructor.

**COM S 672 Advanced Artificial Intelligence**

Spring. 4 credits. Prerequisites: COM S 472 or permission of instructor.

**COM S 674 Natural Language Processing**

Spring. 4 credits. Prerequisites: COM S 472 or permission of instructor. Not offered every year; semester to be announced.

**COM S 676 Reasoning About Knowledge**

Fall. 4 credits. Prerequisites: mathematical maturity and an acquaintance with propositional logic. Offered in even-numbered years.

**[COM S 677 Reasoning About Uncertainty]**

Fall. 4 credits. Prerequisites: mathematical maturity and an acquaintance with propositional logic. Offered in odd-numbered years.]

**COM S 681 Analysis of Algorithms**

Fall. 4 credits. Prerequisite: COM S 381 or 481, or permission of instructor.

**COM S 682 Theory of Computing**

Spring. 4 credits. Prerequisite: (COM S 381 or 481) and (COM S 482 or 681), or permission of instructor.

**COM S 686 Logics of Programs**

Spring. 4 credits. Prerequisites: COM S 481, COM S 682, and (MATH 481 or MATH/COM S 486).

**COM S 709 Computer Science Colloquium**

Fall, spring. 1 credit. S-U grades only. For staff, visitors, and graduate students interested in computer science.

**COM S 713 Seminar in Systems and Methodology**

Fall, spring. 4 credits. Prerequisites: a graduate course employing formal reasoning, such as COM S 600, 611, 613, 615, 671, a logic course, or permission of instructor. Not offered every year; semester to be announced.

**COM S 715 Seminar in Programming Refinement Logics**

Fall, spring. 4 credits. Prerequisite: permission of instructor.

**COM S 717 Topics in Parallel Architectures**

Fall. 4 credits. Prerequisite: COM S 612 or permission of instructor. Not offered every year; semester to be announced.

**COM S 719 Seminar in Programming Languages**

Fall, spring. 4 credits. Prerequisite: COM S 611 or permission of instructor. S-U grades only.

**COM S 722 Topics in Numerical Analysis**

Fall, spring. 4 credits. Prerequisite: COM S 621 or 622 or permission of instructor. Not offered every year; semester to be announced.

**COM S 729 Seminar in Numerical Analysis/ACRI**

Fall, spring. 1-4 credits (to be arranged). Prerequisite: permission of instructor. S-U grades only.

**COM S 754 Systems Research Seminar**

Fall, spring. 1 credit.

**COM S 772 Seminar in Artificial Intelligence**

Fall, spring. 4 credits. Prerequisite: permission of instructor.

**COM S 773/774 Proseminar in Cognitive Studies I & II (also COGST, PHIL, LING, and PSYCH 773/774)**

Fall and spring. 4 credits.

**COM S 775 Seminar in Natural Language Understanding**

Fall, spring. 2 credits.

**COM S 789 Seminar in Theory of Algorithms and Computing**

Fall, spring. 4 credits. Prerequisite: permission of instructor. S-U grades only.

**COM S 790 Special Investigations in Computer Science**

Fall, spring. Prerequisite: permission of a computer science adviser. Letter grade only. Independent research or Master of Engineering project.

**COM S 890 Special Investigations in Computer Science**

Fall, spring. Prerequisite: permission of a computer science adviser. S-U grades only. Master of Science degree research.

**COM S 990 Special Investigations in Computer Science**

Fall, spring. Prerequisite: permission of a computer science adviser. S-U grades only. Doctoral research.

**CZECH**

See Language Courses under Languages and Linguistics.

**DANCE**

See under Department of Theatre, Film and Dance.

**DANISH**

See Language Courses under Languages and Linguistics.

**DUTCH**

See Language Courses under Languages and Linguistics.

**ECONOMICS**

T. Mitra, chair; R. Masson, graduate field representative; T. Lyons, director of undergraduate studies; K. Basu, L. Blume, S. Coate, M. Conlin, G. Cozzi, T. E. Davis, D. Easley, R. Ehrenberg, R. Frank, G. Hay, Y. Hong, N. Kiefer, P. D. McClelland, M. Majumdar, T. O'Donoghue, S. Ortigueira, U. Possen, R. E. Schuler, K. Shell, G. J. Staller, S. Subramanian, E. Thorbecke, M. Veracierto, T. Vogelsang, H. Y. Wan, Jr., J. Wissink. Emeritus: W. Isard, A. Kahn, J. Vanek

The study of economics provides an understanding of the way economies operate and an insight into public issues. The department offers a broad range of undergraduate courses in such fields as money and banking international and comparative economics; econometrics; theory; history; growth and development; and the organization, performance, and control of industry.

**Social Science Distribution Requirement**

The microeconomics distribution requirement can be fulfilled with any of the following:

Economics 101, Economics 301, or Economics 313.

The macroeconomics distribution requirement can be satisfied with any of the following:

Economics 102, Economics 302, or Economics 314.

**The Major Prerequisites**

Economics 101 and 102 and Math 111 (or equivalents, with approval of the director of undergraduate studies), all with grades of C or better.

Economics 301 with a grade of C or better substitutes for 101; Economics 302 with a grade of C or better substitutes for 102.

### Requirements

Eight courses listed by the Department of Economics at the 300 level or above, or approved by the student's major adviser, all with grades of C- or better.

These eight courses must include:

- (1) Economics 313 and 314,
- (2) Economics 321 or Economics 319 and 320,
- (3) at least 3 courses from the following: 318, 320, 322-98, 467.

Economics 301 with a grade of B or better substitutes for both 101 and 313; Economics 302 with a grade of B or better substitutes for both 102 and 314.

If Economics 321 is applied toward the major, neither 319 nor 320 can be applied.

Economics 263, 399, and 499 *cannot* be counted toward the eight-course requirement.

An honors program is currently being offered. Students should consult the director of undergraduate studies before May of their junior year for more information.

Students planning graduate work in economics and business are strongly encouraged to prepare themselves well in mathematics and econometrics. These students are strongly encouraged to enroll in Economics 319-320 rather than Economics 321.

### Courses

#### ECON 101 Introductory Microeconomics

Fall, spring, winter, and summer. 3 credits. Economics 101 is not a prerequisite for 102.

Explanation and evaluation of how the price system operates in determining what goods are produced, how goods are produced, and who receives income, and how the price system is modified and influenced by private organizations and government policy.

#### ECON 102 Introductory Macroeconomics

Fall, spring, winter, and summer. 3 credits. Economics 101 is not a prerequisite for 102.

Analysis of aggregate economic activity in relation to the level, stability, and growth of national income. Topics discussed may include the determination and effects of unemployment, inflation, balance of payments, deficits, and economic development, and how these may be influenced by monetary, fiscal, and other policies.

#### ECON 263 International Economics

Spring and summer. 4 credits. Prerequisite: Economics 101-102 or equivalent.

This course surveys international economics in one semester. First, it surveys the sources of comparative advantage, and it analyzes commercial policy and the institutional aspects of the world trading system. Second, it discusses exchange rates, and it studies theories of balances of payments adjustments. This course is intended primarily for government majors who are comfortable with a less technical approach to international economics. (Cannot be applied to the economics major.)

#### ECON 301 Microeconomics

Fall. 4 credits. Prerequisite: calculus. Intended for students with strong analytical skills who have not taken Economics 101, 102. Can be used to replace both Economics 101 and 313. (Can replace 313 only with grade of B or better). This course covers the topics taught in Economics 101 and 313. An introduction to the theory of consumer and producer behavior and to the functioning of the price system.

#### ECON 302 Macroeconomics

Spring. 4 credits. Prerequisite: Economics 301. Intended for students with strong analytical skills who have not taken Economics 101, 102. Can be used to replace both Economics 102 and 314. This course covers the topics taught in Economics 102 and 314. (Can replace 314 only with grade of B or better). An introduction to the theory of national income determination, unemployment, growth, and inflation.

#### ECON 307 Introduction to Peace Science (also CRP 495.18 and Introduction to Peace Science)

Winter session. 4 credits. Prerequisites: Economics 101-102 or permission of instructor.

Introduction to the theories of and research on conflict resolution. Topics include conflict, its role and impact on society; theories of aggression and altruism; causes of war; game theory; conflict management procedures and other analytical tools and methods of peace science; alternatives to war.

#### ECON 313 Intermediate Microeconomic Theory

Fall, spring, and summer. 4 credits. Prerequisites: Economics 101-102 and calculus.

The pricing process in a private enterprise economy are analyzed under varying competitive conditions, and their role in the allocation of resources and the functional distribution of national income is considered.

#### ECON 314 Intermediate Macroeconomic Theory

Fall, spring, and summer. 4 credits. Prerequisites: Economics 101-102 and calculus.

The theory of national income and determination and economic growth in alternative models of the national economy is introduced. The interaction and relation of these models to empirical aggregate economic data is examined.

#### [ECON 317 Intermediate Mathematical Economics I

Fall. 4 credits. Prerequisites: Economics 101-102 and Math 111-112. Not offered 1998-99.

Introduction of calculus and matrix algebra; problems of maximization of a function of several variables. Economic examples are used to illustrate and teach the mathematical concepts.]

#### [ECON 318 Intermediate Mathematical Economics II

Spring. 4 credits. Prerequisites: Economics 101-102 and Math 111-112. Not offered 1998-99.

Advanced techniques of optimization and application to economic theory.]

#### ECON 319 Introduction to Statistics and Probability

Fall. 4 credits. Prerequisites: Economics 101-102 and Mathematics 111-112.

This course provides an introduction to statistical inference and to principles of probability. It includes descriptive statistics, principles of probability, discrete and continuous distributions, and hypothesis testing (of sample means, proportions, variance). Regression analysis and correlation are introduced.

#### ECON 320 Introduction to Econometrics

Spring. 4 credits. Prerequisites: Economics 101-102, 319, or equivalent.

Introduction to the theory and application of econometric techniques. How econometric models are formulated, estimated, used to test hypotheses, and used to forecast; understanding economists' results in studies using regression model, multiple regression model, and introduction to simultaneous equation models.

#### ECON 321 Applied Econometrics

Fall, spring and summer. 4 credits. Prerequisites: Economics 101-102 and calculus.

This course provides an introduction to statistical methods and principles of probability. Topics to be covered include analysis of data, probability concepts and distributions, estimation and hypothesis testing, regression, correlation and time series analysis. Applications from economics are used to illustrate the methods covered in the course.

#### ECON 323 American Economic History #

Fall. 4 credits. Prerequisites: Economics 101-102 or equivalent.

Problems in American economic history from the first settlements to early industrialization are surveyed.

#### ECON 324 American Economic History #

Spring. 4 credits. Prerequisites: Economics 101-102 or equivalent.

A survey of problems in American economic history from the Civil War to World War I.

#### ECON 324A American Economic History #

Spring. 4 credits. Prerequisites: Economics 101-102 or equivalent. Instructor's permission required.

Same material as Economics 324, seminar limited to 12 students.

#### ECON 331 Money and Credit

Fall. 4 credits. Prerequisites: Economics 101-102 and 314.

A systematic treatment of the determinants of the money supply and the volume of credit. Economic analysis of credit markets and financial institutions in the United States.

#### ECON 333 Financial Economics

Spring. 4 credits. Prerequisites: Economics 313 and 314.

The theory and decision making in the presence of uncertainty and the practical aspects of particular asset markets are examined.

#### ECON 335 Public Finance: The Microeconomics of Government

Fall. 4 credits. Prerequisites: Economics 101-102 and 313, or their equivalent, and one semester of calculus.

The role of government in a free market economy is analyzed. Topics covered include

public goods, market failures, allocation mechanisms, optimal taxation, effects of taxation, and benefit-cost analysis. Current topics of an applied nature will vary from term to term.

**ECON 336 Public Finance: Resource Allocation and Fiscal Policy**

Spring. 4 credits. Prerequisites: Economics 101-102, 313 or their equivalent and one semester of calculus.

This course covers the revenue side of public finance and special topics. Subjects covered include the federal debt, the budget, and government regulation and transfers, as well as problems like local public goods, health care, education, the hierarchy of governmental structure, plus a variety of applied problems.

**ECON 341 Labor Economics**

For description, see ILRL 240.

**ECON 351 Industrial Organization I**

Fall. 4 credits. Prerequisite: Economics 313 or its equivalent.

This course examines markets with only a few firms (i.e., oligopolies), and the primary focus will be the strategic interactions between firms. Topics include static competition in oligopolies, cartels and other forms of collusive behavior, competition between firms producing differentiated products, entry behavior, R&D behavior, and government interventions in oligopoly industries (e.g., antitrust laws).

**ECON 352 Industrial Organization II**

Spring. 4 credits. Prerequisite: Economics 313 or its equivalent.

This course primarily focuses on the pricing decisions of firms. The course does not consider the strategic response of other firms to these pricing decisions. The pricing decisions include price discrimination, commodity bundling, pricing a product line and pricing a durable good. In addition to pricing decisions, the course will consider topics associated with private information such as adverse selection, signaling and moral hazard. Numerous theoretical models are presented and empirical results are discussed.

**ECON 361 International Trade Theory and Policy**

Fall. 4 credits. Prerequisites: Economics 101-102 and 313.

This course surveys the sources of comparative advantage. It studies commercial policy and analyzes the welfare economics of trade between countries. Some attention is paid to the institutional aspects of the world trading system.

**ECON 362 International Monetary Theory and Policy**

Spring and summer. 4 credits. Prerequisites: Economics 101-102 and 314.

This course surveys the determination of exchange rates and theories of balance of payments adjustments. It also explores open economy macroeconomics, and it analyzes some of the institutional details of foreign exchange markets, balance of payments accounting, and the international monetary system.

**ECON 371 Economic Development**

Spring. 4 credits. Prerequisites: Economics 313 or equivalent.

Study of the problem of sustaining accelerated economic growth in less-developed countries. Trade-offs between growth, welfare, and equity; the legacy of colonialism; relevance of

history and economic theory; problems of capital formation, economic planning and international specialization; and the interaction of industrialization, agricultural development, and population change are emphasized.

**[ECON 372 Applied Economic Development**

Fall or spring. 4 credits. Prerequisite: Economics 101-102. Not offered 1998-99.

This course examines several special topics in the economics of developing countries. Among the topics covered recently are the concepts of development and underdevelopment, the debate over development economics, the peasant household and its place in the world economy, the debt crisis, the state vs. market debate and the role of the state in economic development, and the question of sustainable development.]

**ECON 399 Readings in Economics**

Fall or spring. Variable credit. Independent study.

**ECON 404 Economics and the Law**

Fall. 4 credits. Prerequisite: Economics 101.

An examination, through the lens of economic analysis, of legal principles drawn from various branches of law, including contracts, torts, and property. Cases are assigned for class discussion; in addition, there are several writing assignments.

**ECON 408 Production Economics and Policy**

For description, see ARME 608.

**ECON 409 Environmental Economics and Policy**

For description, see ARME 451.

**ECON 413 Economics of Consumer Demand**

For description, see CEH 613.

**ECON 415 Price Analysis**

For description, see ARME 415.

**[ECON 416 Intertemporal Economics**

Spring. 4 credits. Prerequisites: Economics 313. Not offered 1998-99.

This course is intended for advanced economics majors who are especially interested in economic theory. Topics to be covered: (a) review of the one good Ramsey model of optimal savings and accumulation; conditions for intertemporal efficiency in production; comparative dynamics and sensitivity analysis; (b) some earlier models of capital accumulation; the roles of present value and internal rate of return in guiding investment decisions; (c) growth, exhaustible resources; pollution and conservation; discussion of the trade-offs facing a society.]

**ECON 417 History of Economic Analysis #**

Spring. 4 credits. Prerequisites: Economics 101-102 or permission of instructor.

Early writings in economics and their relationship to current economic analysis and policy issues, for example, ancient and medieval philosophers on justice in exchange; mercantilist arguments for trade protection; early theories about the effect of monetary expansion (D. Hume); the role of the entrepreneur (Cantillon); and general competitive equilibrium (the Physiocrats). The most recent reading assignment in this course is Adam Smith's *Wealth of Nations* but the emphasis is on the relationship between the precursors of Adam Smith and his *Wealth*

of Nations to modern economics analysis and current efforts to answer some of the questions raised in the early writing on economics.

**[ECON 419 Economic Decisions under Uncertainty**

Fall. 4 credits. Prerequisites: Economics 313 and 319. Not offered 1998-99.

This course provides an introduction to the theory of decision making under uncertainty with emphasis on economic applications of the theory.]

**ECON 420 Economics of Family Policy—Adults**

Economics 420 and 421 together, count as one course for the Economics major. For description, see CEH 320.

**ECON 421 Economics of Family Policy—Children**

Economics 420 and 421 together, count as one course for the Economics major. For description, see CEH 321.

**ECON 422 The Economics of Infrastructure and a Sustainable Environment**

For description, see CEE 422.

**ECON 424 Economics of Household Behavior**

For description, see CEH 624.

**ECON 425 Economic History of Latin America @ #**

Spring. 4 credits.

A survey of changing economic institutions and policies from pre-Columbian to modern times.

**ECON 426 History of American Enterprise #**

Spring. 4 credits. Prerequisites: Economics 101-102 or equivalent.

History of the changing structure of American business from 1800 to the present, with major emphasis upon developments after the Civil War. The focus of the course will be the changing structure of challenges (for example, the rise of unions, development of a national capital market, changing role of government) and the various responses of business organizations and entrepreneurs to those challenges.

**ECON 430 Policy Analysis: Welfare Theory, Agriculture, and Trade**

For description, see ARME 630.

**ECON 432 Health Economics and Policy**

For description, see CEH 632 or PAM 653.

**ECON 435 Information and Regulation**

For description, see CEH 635.

**ECON 440 Analysis of Agricultural Markets**

Economics 440 and 441 together, count as one course for the Economics major. For description, see ARME 640.

**ECON 441 Commodity Futures Markets**

Economics 440 and 441 together, count as one course for the Economics major. For description, see ARME 641.

**ECON 444 Modern European Economic History**

For description, see ILRL 444.

**ECON 445 Topics in Microeconomic Analysis—Markets and Planning**

Fall. 4 credits. Prerequisites: Economics 313.



This is a course of economic theory designed for upperclass undergraduates. Course contents may vary from year to year. Issues that may be examined include (1) How can economic activities be efficiently organized through the market mechanism? Why is the presence of many traders essential to efficiency? (2) What can be done if the indivisibility in production processes becomes an important hindrance to competitive pricing? (3) How can economic planning be decentralized efficiently? This course serves two purposes: (1) to introduce concepts that are novel to undergraduates and relevant to public policy but require only a modicum of analytic tooling up, and (2) to illustrate the deductive approach of modern economic analysis—how to define concepts unambiguously, how to form propositions in clear-cut fashion, and how to follow up logical implications sequentially to the conclusion.

**[ECON 446 Topics in Macroeconomic Analysis—Is Keynesianism Dead?]**

Fall or spring. 4 credits. Prerequisites: Economics 314. Not offered 1998–99. The coverage of this course may vary from term to term. Presently the content of the course deals with the range of criticisms against Keynesian theory by the New Classical Economics, alias the Equilibrium School, alias the Rational Expectations School. Despite the fact that almost all intermediate macroeconomic textbooks are Keynesian in perspective, clearly Keynesian economics is currently at bay. We shall review critically, critiques to Keynesian theory.]

**ECON 448 Housing Economics**

For description, see CEH 648.

**ECON 450 Resource Economics**

For description, see ARME 450.

**ECON 451 Economic Security**

For description, see ILRLE 340.

**ECON 453 The Economics of Unemployment**

For description, see ILRLE 348.

**ECON 454 The Economics of Health Care**

For description, see ILRLE 440.

**ECON 455 Income Distribution**

For description, see ILRLE 441.

**ECON 456 The Economics of Employee Benefits**

For description, see ILRLE 442.

**ECON 457 Women in the Economy**

For description, see ILRLE 445.

**ECON 458 Topics in Twentieth Century Economic History**

For description, see ILRLE 448.

**ECON 459 Economic History of British Labor 1750–1940**

For description, see ILRLE 640.

**ECON 460 Economic Analysis of the Welfare State**

For description, see ILRLE 642.

**ECON 461 The Economics of Occupational Safety and Health**

For description, see ILRLE 644.

**ECON 462 Labor in Developing Economies**

For description, see ILRIC 332.

**ECON 464 Economics of Agricultural Development**

For description, see ARME 464.

**ECON 465 Food and Nutrition Policy**

For description, see ARME 665.

**ECON 466 Economics of Development**

For description, see ARME 666.

**ECON 467 Game Theory**

Fall. 4 credits. Prerequisites: Economics 313 and 319.

This course studies mathematical models of conflict and cooperation in situations of uncertainty (about nature and about decision makers).

**ECON 468 Economic Problems of Latin America @**

Spring. 4 credits. Prerequisites: Economics 101–102.

Current topics include, international debt, capital flight, economic integration, stabilization programs, etc.

**ECON 469 The Economy of China @**

Fall. 4 credits. Prerequisites: Economics 101–102 or permission of instructor.

Examines the development of the Chinese economy and the evolution of China's economic system since 1949.

**ECON 471 The Economies of the Former Soviet Union and of Central Europe: From Central Planning to Markets**

Fall. 4 credits. Prerequisites: Economics 313 and 314.

The course will introduce first the basic features of a centrally planned economy and proceed to consider the most important example: the rise and fall of the Soviet Union. Secondly, the analysis will be extended to what used to be known as "Eastern Europe" (e.g., Czechoslovakia, Hungary, Poland). From this necessary historical background, the course will proceed to current attempts to move away from Socialist central planning and its legacies to market economy, privatization, and independence.

**ECON 472 Comparative Economic Systems: East and West**

Fall. 4 credits. Prerequisites: Economics 101–102.

The course will develop first a framework for studying economic systems and national economies and present three simple stylized systemic models: capitalist market, socialist market, and central planning. Secondly, the course will consider economic goals to be achieved (such as growth, stability, and productivity) and introduce quantitative measures used in the evaluation of the performance. Thirdly, comparative studies of selected national economies representing the models will be carried out.

**ECON 473 Economics of Export-led Development @**

Spring. 4 credits. Prerequisites: Economics 313, 314, or their equivalent.

This course will examine the phenomenon of export-led development from both the theoretical and empirical points of view. Concentration will be on experiences within the West Pacific Rim.

**ECON 474 National and International Food Economics**

For description, see NS 457.

**ECON 475 The Economy of India @**

Fall. 4 credits. Prerequisite: Economics 101–102 or equivalent background.

This course will present the major economics and development problems of contemporary India and to examine the country's future economic prospects. It will, however, be our aim to discuss these problems in their proper historical perspectives. Hence, the course will start with a brief outline of the social and political history of India. It will then turn to a more detailed account of the economic history of India in two stages.

**ECON 499 Honors Program**

Fall and spring. 8 credits. Prerequisites: Economics 313, 314, 321 (or 319–320).

Consult the Director of Undergraduate Studies for details. Interested students should apply to the program in the spring semester of their junior year.

**Graduate Courses and Seminars**

**ECON 609 Microeconomic Theory I**

Fall. 4 credits.

Topics in consumer and producer theory.

**ECON 610 Microeconomic Theory II**

Spring. 4 credits.

Topics in consumer and producer theory, equilibrium models and their application, externalities and public goods, intertemporal choice, simple dynamic models and resource depletion, choice under uncertainty.

**ECON 613 Macroeconomic Theory I**

Fall. 4 credits.

Static general equilibrium. Intertemporal general equilibrium: infinitely lived agents models and overlapping generations models. Welfare theorems. Equivalence between sequential markets and Arrow-Debreu Markets. Ricardian proposition. Modigliani-Miller theorem. Asset pricing. Recursive competitive equilibrium. The Neoclassical Growth Model. Calibration. Introduction to dynamic programming.

**ECON 614 Macroeconomic Theory II**

Spring. 4 credits.

Dynamic programming. Stochastic growth. Search models. Cash-in-advance models. Real business-cycle models. Labor indivisibilities and lotteries. Heterogeneous agents models. Optimal fiscal and monetary policy. Sustainable plans. Endogenous growth.

**ECON 616 Applied Price Theory**

Spring. 4 credits.

The course emphasizes the applications of the principles of price theory to a variety of problems taken from concrete, practical settings.

**ECON 617 Intermediate Mathematical Economics I**

Fall. 4 credits. Prerequisites: Calculus II and intermediate linear algebra.

The course will cover selected topics in Matrix algebra (vector spaces, matrices, simultaneous linear equations, characteristic value problem), calculus of several variables (elementary real analysis, partial differentiation, convex analysis), classical optimization theory (unconstrained maximization, constrained maximization).

**ECON 618 Intermediate Mathematical Economics II**

Spring. 4 credits.

A continuation of Economics 617, the course develops additional mathematical techniques for applications in economics. Topics covered could include study of dynamic systems (linear and nonlinear difference equations, differential equation, chaotic behavior), dynamic optimization methods (optimal control theory, nonstochastic and stochastic dynamic programming), game theory (repeated dynamic and evolutionary games).

**ECON 619 Econometrics I**

Fall. 4 credits. Prerequisites: Economics 319-320 or permission of instructor.

This course gives the probabilistic and statistical background for meaningful application of econometric techniques. Topics to be covered are (1) probability theory: probability spaces, random variables, distributions, moments, transformations, conditional distributions, distribution theory and the multivariate normal distribution, convergence concepts, laws of large numbers, central limit theorems, Monte Carlo simulation; (2) statistics: sample statistics, sufficiency, exponential families of distributions. Further topics in statistics will be considered in Economics 620.

**ECON 620 Econometrics II**

Spring. 4 credits. Prerequisite: Economics 619.

This course is a continuation of Economics 619 (Econometrics I) covering (1) statistics: estimation theory, least squares methods, method of maximum likelihood, generalized method of moments, theory of hypothesis testing, asymptotic test theory, and nonnested hypothesis testing and (2) econometrics: the general linear model, generalized least squares, specification tests, instrumental variables, dynamic regression models, linear simultaneous equation models, nonlinear models, and applications.

**ECON 639 Public Political Economy (also CEE 528)**

Spring. 4 credits. Prerequisite: Economics 313 or equivalent.

Designed as part of the core curriculum for MPA students in Cornell's Institute for Public Affairs, this course emphasizes the application of economic concepts and methods in the identification, formulation, administration and evaluation of public policy. It is open to all students with a policy interest who have met the prerequisite.

Topics covered include the intrinsic nature of goods and services, decreasing cost of production, externalities and congestion, attributes and government regulation essential for an effective market, the efficient role of government in non-market resource allocation methods, methods for inferring the demand for public goods, efficient public decision-making, the supply of public services and raising revenue through taxes and user-fees. Particular emphasis will be placed on the intersection between fairness and efficiency in resolving conflicts over public good provision, including defining jurisdictions for the provision of particular services. Examples will emphasize the proper provision of infrastructure services: physical (transportation, utilities, tele-information); human-capital (education and R&D) and biological (renewable resources, species diversity and the environment).

**ECON 699 Readings in Economics**

Fall or spring. Variable credit. Independent study.

**ECON 703 Seminar in Peace Science**

Fall. 4 credits.

Among topics to be covered at an advanced level are game theory, coalition theory, bargaining and negotiation processes, cooperative procedures, microbehavior models, macrosocial processes, and general systems analysis.

**ECON 710 Stochastic Economics: Concepts and Techniques**

Spring. 4 credits. Prerequisites: Economics 609, 610, 613, 614, 619, and 620.

This course will review a number of techniques that have been useful in developing stochastic models of economic behavior. Among these are (a) discrete-time Markov processes, (b) dynamic programming under uncertainty, and (c) continuous-time diffusion processes. Examples of economic models will be drawn from recent literature on optimal capital accumulation and optimal savings and portfolio selection problems; permanent income hypothesis; dynamic models of price adjustment, etc. Advanced graduate students contemplating work in economic theory and econometric theory will be able to get some exposure to current research.

**ECON 711 Advanced Microeconomic Theory: "The Mathematics of Institutions"**

4 credits.

The objectives of this class are to provide the tools to study institutions and to analyze some particular institutions. We will borrow from many literatures: game theory, social choice, political science, macroeconomics, microeconomics. The structure of the class will be rather informal. The syllabus will only be an indicator of the material that will be covered during the class. In particular, depending upon the number of students that attend and their interests, we can decide to shorten some parts of this syllabus and to spend more time on other parts.

**ECON 712 Advanced Macroeconomics**

4 credits.

The purpose of this course is to introduce the student to some of the topics and analytic techniques of current macroeconomic research. The course will fall into three parts: dynamic programming, new Keynesian economics, and recent theories of economic growth. The dynamic programming section will include models of consumption, investment, and real business cycles. The new Keynesian section will cover models of wage and price rigidity, coordination failure and credit markets. The section on endogenous growth will look at recent efforts to add non-convexities to models of optimal growth. These topics are intended to complement the material on overlapping generations covered elsewhere.

**ECON 717 Mathematical Economics**

4 credits. Prerequisites: ECON 609-610 (or equivalent training in micro theory) and MATH 413-414 (or equivalent training in analysis).

The primary theme of this course is to explore the role of prices in achieving an efficient allocation of resources in dynamic economies. Some of the classical results on static equilibrium theory and welfare economics on attaining optimal allocation through decentral-

ized organizations are examined through an axiomatic approach. Some basic issues on capital theory are also analyzed.

**ECON 718 Topics in Mathematical Economics**

4 credits.

**ECON 719 Advanced Topics in Econometrics I**

Fall. 4 credits. Prerequisites: Economics 619-620 or permission of instructor.

Advanced topics in econometrics, such as asymptotic estimation and test theory, robust estimation, Bayesian inference, advanced topics in time-series analysis, errors in variable and latent variable models, qualitative and limited dependent variables, aggregation, panel data, and duration models.

**ECON 720 Advanced Topics in Econometrics II**

Spring. 4 credits. Prerequisites: Economics 619-620 or permission of instructor.

For description see Economics 719.

**ECON 721 Time Series Econometrics**

Spring. 4 credits. Prerequisites: Economics 619-620 or permission of instructor.

This course covers traditional and current time series techniques that are widely used in econometrics. Topics include the theory of stationary stochastic processes including univariate ARMA(p,q) models, spectral density analysis, and vector autoregressive models; parametric and semi-parametric estimation; current developments in distributional theory; estimation and testing in models with integrated regressors including, unit root tests, cointegration, and permanent vs. transitory components.

**ECON 731 Monetary Theory and Policy**

Spring. 4 credits. Prerequisites: Economics 614 or permission of the instructor.

Advanced topics in monetary economics, macroeconomics, and economic growth—such as overlapping-generations, taxes and transfers denominated in money, transactions demand for money, multi-asset accumulation, exchange rates, and financial intermediation.

**ECON 732 Monetary Theory and Policy**

Fall. 4 credits. Prerequisites: Economics 731 or permission of the instructor.

Advanced topics in monetary economics, macroeconomics, and economic growth—such as economic volatility, the "burden" of government debt, restrictions on government borrowing, dynamic optimization, endogenous growth theory, technological evolution, financial market frictions, and cyclical fluctuations.

**ECON 735 Public Finance: Resource Allocation and Fiscal Policy (also ARME 735)**

Spring. 4 credits.

This course develops a mathematical and highly analytical understanding of the role of government in market economies and the fundamentals of public economics and related issues. Topics covered include generalizations and extensions of the fundamental theorems of welfare economics, in-depth analysis of social choice theory and the theory on implementation in economic environments, public goods and externalities and other forms of market failure associated with asymmetric information. The theoretical foundation for optimal direct and indirect taxation is also introduced along with the development of various consumer surplus measures and an

application to benefit cost analysis. Topics of an applied nature vary from semester to semester depending upon faculty research interests.

**ECON 736 Public Finance: Resource Allocation and Fiscal Policy**

Fall. 4 credits.

This course spends a large part of the semester covering the revenue side of public finance. Topics include the impact of various types of taxes as well as the determination of optimal taxation. The impact of taxation on labor supply, savings, company finance and investment behavior, risk bearing, and portfolio choice are explored. Other topics include the interaction of taxation and inflation, tax evasion, tax incidence, social security, unemployment insurance, deficits, and interactions between different levels of government.

**ECON 737 Location Theory and Regional Analysis**

Fall. 4 credits. Prerequisites: Economics 609, 617, and Econometrics. Not offered 1998-99.

Economic principles influencing the location of economic activity, its spatial equilibrium structure, and dynamic forces. Topics include spatial pricing policies, price competition, and relocation by firms; residential location patterns; patterns of regional growth and decline; and patterns of urbanization.]

**ECON 741 Seminar in Labor Economics**  
For description see ILRLE 744.

**ECON 742 Seminar in Labor Economics**  
For description see ILRLE 745.

**ECON 747 Economics of Evaluation (also Industrial and Labor Relations 647)**  
For description see ILRLE 647.

**ECON 748 Issues in Latin American Development**

Fall. 4 credits. Not offered 1998-99.

The topics include: "informal sector" (or multi-part labor markets), evolving capital markets (particularly the market for short-term, domestic currency denominated public sector debt, privatization, etc.). The emphasis will be placed on the impact of these institutional (or structural) changes on economic growth.]

**ECON 751 Industrial Organization and Regulation**

Fall. 4 credits.

This course focuses primarily on recent theoretical advances in the study of industrial organization. Topics covered include market structure, non-linear pricing, quality, durability, location selection, advertising, repeated games, collusion, entry deterrence, managerial incentives, switching costs and government intervention. These topics are discussed in a game-theoretic context.

**ECON 752 Industrial Organization and Regulation**

Spring. 4 credits. Prerequisites: Economics 609 and 651.

This course rounds out some topics in the Theory of Industrial Organization with the specific intent of addressing the empirical implications of the theory. The course reviews empirical literature in the SCP paradigm and in the NEIO paradigm.

**ECON 753 Public Policy Issues for Industrial Organizations**

Spring. 4 credits. Prerequisites: Economics 609, 610, and 751. Not offered 1998-99.

The course takes an in-depth view of the interaction between the government and business. Methods of business control, including antitrust, price regulation, entry regulation, and safety regulation. Emphasis will be not only on the economic effects on business, but on the economics of selecting and evolving the method of control.]

**ECON 755 Rivalry and Cooperation**

Fall. 4 credits. Prerequisites: Economics Graduate Core or instructor's permission. Not offered 1998-99.

In standard models, economic interaction is impersonal. Agents respond to price signals and measure their own welfare not in relative but in absolute terms; and cooperative behavior emerges only when it coincides with narrow self-interest. This course will explore the details of rivalry and cooperation in an effort to synthesize broader views of economic interaction. Topics will include the effect of concerns about relative income on wage rates, consumption, savings, and regulation; the effect of concerns about fairness on prices and wages; the conditions that foster trust and cooperation; and the role of positional competition in the distribution of economic rewards.]

**ECON 756 Noncooperative Game Theory**

Fall. 4 credits. Prerequisites: Economics 609-610 and 619.

This course surveys equilibrium concepts for non-cooperative games. We will cover Nash equilibrium and a variety of equilibrium refinements, including perfect equilibrium, proper equilibrium, sequential equilibrium and more! We will pay attention to important special classes of games, including bargaining games, signalling games, and games of incomplete information. Most of our analysis will be from the strict decision-theoretic point of view, but we will also survey some models of bounded rationality in games, including games played by automata.

**ECON 757 Economics of Imperfect Information**

Spring. 4 credits. Prerequisites: Economics 609-610 and 619.

The purpose of this course is to consider some major topics in the economics of uncertain information. Although the precise topics considered will vary from year to year, subjects such as markets with asymmetric information, signalling theory, sequential choice theory, and record theory will be discussed.

**ECON 760 Topics in Political Economy**

Fall. 4 credits. Prerequisite: Economics 313 or equivalent.

This course will develop critiques and extensions of economic theory, taking into account the political and social moorings of economic activity and equilibria. The formation and persistence of social norms; the meaning and emergence of property rights; the role of policy advice in influencing economic outcomes; and the effect of political power and ideology on economic variables will be studied. While these topics were popular in the classic works of political economy, recent advances in game theory and, more generally, game-theoretic thinking allows us to approach these topics from a

new perspective. Hence, the course will begin by devoting some lectures to elementary ideas in game-theory and strategic analysis.

**ECON 761 International Economics: Trade Theory and Policy**

Fall. 4 credits.

This course surveys the sources of comparative advantage. It analyzes simple general equilibrium models to illustrate the direction, volume, and welfare effects of trade. Topics in game theory and econometrics as applied to international economics may be covered.

**ECON 762 International Economics: International Finance and Open Economy Macroeconomics**

Spring. 4 credits.

This course surveys the determination of exchange rates and theories of balance of payment adjustments. It explores open economy macroeconomics by analyzing models of monetary economies. Topics in monetary economics and econometrics as applied to international economics will be covered.

**ECON 770 Topics in Economic Development**

For description, see ARME 667.

**ECON 771 Economic Development and Development Planning**

Spring. 4 credits.

Reviews the existing literature on the determinants of economic growth and the interrelationship between growth and income distribution through the process of economic development. A general equilibrium approach to development is taken. Computable general equilibrium models, based on social accounting matrices, are used to explore the performance of a variety of developing countries. Among the topics explored are: impact of structural adjustment and stabilization policies on growth, equity and internal and external equilibrium; sectoral interrelationship and interdependence through the growth process. Critical review and evaluation of national, sectoral and regional development models built for such developing countries as India, Brazil, Indonesia and Ecuador.

**ECON 772 Economics of Development**

Spring. 4 credits. Prerequisites: first-year graduate economic theory and econometrics.

Analytical approaches to the economic problems of developing nations. Topics to be covered include: some old and new directions in development economics thinking, the welfare economics of poverty and inequality, empirical evidence on who benefits from economic development, labor market models, project analysis with application to the economics of education, and development policy.

**ECON 773 Economic Development**

Fall. 4 credits. Prerequisites: Economics 609 and 620.

The course is concerned with theoretical and applied works that seek to explain economic development, or lack thereof, in countries at low-income levels. Specific topics vary each semester.

**ECON 774 Economic Systems**

Spring. 4 credits.

The course deals with economic systems, with the formerly centrally planned economies, and with the economies in transition.

**ECON 784 Seminars in Advanced Economics**

Fall and spring. 4 credits.

**ENGLISH**

J. Culler, chair; B. B. Adams, director of undergraduate studies (255-3492); D. Mermin, director of graduate studies (255-7989); H. S. McMillin, director of honors program; A. R. Ammons, J. Ashton, J. P. Bishop, A. Boehm, F. V. Bogel, L. Bogel, Laura Brown, Lois Brown, C. Chase, B. Correll, S. Davis, L. Fakundiny, R. T. Farrell, D. Fried, A. Galloway, R. Gilbert, J. Goldsby, K. Gottschalk, E. Hanson, L. Herrin, T. D. Hill, M. Hite, M. Jacobus, P. Janowitz, B. Jeyifo, C. V. Kaske, M. Koch, C. S. Levy, D. E. McCall, K. A. McClane, M. McCoy, B. Maxwell, S. P. Mohanty, D. Moore, R. Morgan, T. Murray, B. V. Olguin, R. Parker, J. Porte, E. Rosenberg, N. Saccamano, S. Samuels, P. Sawyer, D. R. Schwarz, M. Seltzer, K. Shanley, H. E. Shaw, S. Siegel, H. Spillers, G. Teskey, S. Vaughn, H. M. Viramontes, W. Wetherbee, S. Wong.  
Emeriti: M. H. Abrams, J. F. Blackall, A. Caputi, D. Eddy, R. Elias, A. Lurie, P. Marcus, J. R. McConkey, S. Parrish, M. A. Radzinowicz, S. C. Strout

The Department of English offers a wide range of courses in English, American, and Anglophone literature as well as in creative writing, expository writing, and film analysis. Literature courses focus variously on the close reading of texts, the study of particular authors and genres, questions of critical theory and method, and the relationship of literary works to their historical periods and to other disciplines. The department seeks not only to foster analytical reading and lucid writing but also, through the study of literary texts, to teach students to think about the nature of language and to be alert to the rigors and pleasures of that ordinary and peculiar activity, reading.

Students who major in English develop their own programs of study in consultation with their advisers. Some focus on a particular historical period or literary genre; others combine sustained work in creative writing with the study of literature. Others pursue special interests in such areas as women's literature, African-American literature, literature and the visual arts, or critical theory.

Many students informally supplement their course work in English by attending the public lectures and poetry readings sponsored by the department, or by writing for campus literary magazines.

**The Major**

The Department of English recommends that students prepare themselves for the English major by taking at least one introductory course. Freshmen interested in majoring in English are encouraged to take one or more of the following freshman seminars: The Reading of Fiction (English 270), The Reading of Poetry (English 271), Introduction to Drama (English 272). These courses concentrate on the skills basic to the English major and to much other academic work—responsive, sensitive reading and lucid, forceful writing. As freshman seminars, English 270, 271, or 272 will satisfy one-half the College of Arts and Sciences freshman seminar requirement.

They are open to all second-term freshmen and are also open, as space permits, to first-term freshmen with scores of 700 or above on the CEEB College Placement Tests in English composition or literature, or 4 or 5 on the CEEB Advanced Placement Examination in English, as well as to students who have completed another freshman seminar.

English 201 and 202, which together constitute a two-semester survey of major British writers, though not required are strongly recommended for majors and prospective majors because they afford the kind of overview and introduction to authors, periods, and literary genres that helps students make more informed choices of advanced courses. The American Literary Tradition (English 275), Creative Writing (English 280 or 281), and the Essay in English (English 295) are also suitable preparations for the major.

**Course Requirements**

English majors are required to complete, with passing letter grades, six credits of foreign language study in courses for which qualification is a prerequisite. These courses should be in the literature of the foreign language. (Advanced Placement credit DOES NOT fulfill this requirement, nor does the study of foreign literature in translation.) Majors are urged to complete this requirement by the end of their sophomore year, and those who enter Cornell without sufficient preparation should begin their language study at once.

Besides fulfilling the English Department language requirement, each major must complete with passing letter grades at least 36 credit hours in courses approved for the major. All English courses numbered 300 and above are approved for the major. In addition, all 200-level English courses except freshman seminars (English 270, 271, and 272), courses in creative and expository writing (English 280, 281, 288, and 289), and those courses which state that they are intended for nonmajors are approved for the major, but a student may use no more than four 200-level courses in accumulating the 36 credits required to complete the major. English majors may use the same courses to satisfy both College of Arts and Sciences distribution requirements and English major requirements.

Of the 36 credits required to complete the major, 12 credits (three courses) must be taken in literature originally written in English before 1800. Students may count toward the English major a maximum of 12 credits in courses in literature or creative writing, at the 300 level or above, given by such departments as Comparative Literature, Theatre, Film & Dance, Classics, Romance Studies, German Studies, and Russian, or other academic units and programs such as the African Studies and Research Center, the Society for the Humanities, Asian American Studies, and Latino Studies. Double majors may count courses at the 300 level or above taken in their other major toward these 12 credits if such courses are approved by their English department adviser as relevant to their program of study.

**The Major in English with Honors**

Second-term sophomores who have done superior work in English and related subjects are encouraged to seek admission to the department's program leading to the degree of Bachelor of Arts with Honors in English.

Following an interview with the chair of the Honors committee, qualified students will be admitted provisionally to the program. During their junior year, these students must complete at least one Honors seminar (English 491 or 492) and are encouraged to take an additional 400-level English course in the field in which they plan to concentrate. On the basis of work in these and other English courses, a provisional honors candidate is expected to select a thesis topic and secure a thesis adviser by the end of the junior year. A student who has been accepted by a thesis adviser becomes a candidate for honors rather than a provisional candidate.

During the senior year, each candidate for Honors in English enrolls in a year-long tutorial (English 493 and 494) with the faculty member chosen as thesis adviser. The year's work culminates in the submission of a substantial scholarly or critical essay to be judged by at least two members of the faculty.

More information about the program may be found in the brochure for honors candidates available in the English office.

**Courses for Nonmajors**

For students not majoring in English, the department makes available a variety of courses at all levels. Some courses at the 200 level are open to qualified freshmen, and all of them are open to sophomores. Courses at the 300 level are open to sophomores, juniors, and seniors and to others with permission of the instructor. The suitability of courses at the 400 level for nonmajors will vary from topic to topic, and permission of the instructor is required.

**Freshman Writing Seminars**

As part of the Freshman Writing Program, the Department of English offers many one-semester courses concerned with various forms of writing (narrative, biographical, expository), with the study of specific areas in English and American literature, and with the relation of literature to culture. Students may elect any two of these courses during their first year to satisfy the Freshman Writing Seminar requirement. Descriptions of Freshman Writing Program offerings may be found in the Freshman Writing Program listings, available from college registrars in August for the fall term and in November for the spring term.

**Freshman Writing Seminars Recommended for Prospective Majors****ENGL 270 The Reading of Fiction**

Fall, spring, each summer. 3 credits. Each section limited to 17 students. Freshman Writing Seminar. Recommended for prospective majors in English.

This course examines modern fiction, with an emphasis on the short story and novella. Students will write critical essays on English, American, and continental authors who flourished between 1870 and the present, such as Joyce, Woolf, James, Lawrence, Tolstoy, Kafka, Fitzgerald, Faulkner, Rhys, Welty, Salinger, and Morrison. Instructors may include the reading of a novel. This course does not satisfy requirements for the English major.



**271 The Reading of Poetry**

Fall, spring. 3 credits. Each section limited to 17 students. Recommended for prospective majors in English.

This course is designed to increase the student's ability to understand and write about poetry. Readings will be drawn from the major periods, modes, and genres of poetry written in English. This course does not satisfy requirements for the English major.

**ENGL 272 Introduction to Drama**

Fall, spring. 3 credits. Each section limited to 17 students. Freshman Writing Seminar. Students in this seminar study plays, older and newer, in a variety of dramatic idioms and cultural traditions. A typical reading list might include works by Sophocles, Shakespeare, Molière, Chekhov, Brecht, Miller, Williams, Beckett, and O'Casey. Course work consists of writing and discussion and the occasional viewing of live or filmed performances. This course does not satisfy requirements for the English major.

**Expository Writing****ENGL 288-289 Expository Writing**

Fall and spring. 3 credits. Each section limited to 16 students. Students must have completed their colleges' freshman writing requirements or have permission of the instructor. S. Davis and staff.

English 288-89 offers guidance and an audience for students who wish to gain skill in expository writing. Each section provides a context for writing defined by a form or use of exposition, a disciplinary area, a practice, or a topic intimately related to the written medium. Course members will read in relevant published material and write and revise their own work regularly, while reviewing and responding to each other's. Because these seminar-sized courses depend on members' full participation, regular attendance and submission of written work are required. Students and instructors will confer individually throughout the term. **English 288-289 does not satisfy requirements for the English major.**

Section 1—Speech Acts and the First Amendment—Schweber, H.

Section 2—Writing about Women, Anger, and Culture—White, H.

Section 3—Into the Wild—Dougherty, J.

Section 4—Reading the News, Understanding the Media—Tarr, P.

Section 5—The Reflective Essay—Boehm, A.

Section 6—Minding the Body—Boehm, A.

Section 7—Issues and Audiences—LeGendre, B.

Section 8—Writing in the Electronic Age—Davis, S.

**Spring 1999:** To be announced.

See English department *Course Offerings* for full fall and spring section descriptions.

**ENGL 381 Reading as Writing**

Spring. 4 credits. Course limited to 15 students. Prerequisite: permission of the instructor on the basis of a writing sample (critical/interpretive prose), which should reach the instructor before the first day of class. S. Davis.

This course practices and studies related arts: reading selected 19th- and 20th- century prose fictions and poems and writing interpretive essays about them—but also, writing as a reader of one's own work and revising in the light of others' responses to it. Course members will work with a fairly small number of texts and build sustained essays from shorter (written) "readings" of them. The texts (tentatively): Marilynne Robinson's *Housekeeping*, poems of Wordsworth, poems and stories of Poe, Vladimir Nabokov's *Lolita*; Doris Lessing's *Memoirs of a Survivor*, and J. M. Coetzee's *Waiting for the Barbarians*. Students will present their work to the group at various stages of completion and develop a portfolio of well-crafted prose for submission at the end of the term. With the help of a few theorists of reading and literary reception, they will also pay attention to the ways in which both critical readers and creative writers "rewrite" the texts they read. This is a course for English majors and nonmajors who wish to extend their mastery of critical and interpretive prose and their understanding of what they do when they write it. It will be advantageous for students planning to write honors theses in English or another discipline.

**ENGL 386 Philosophic Fictions**

Fall. 4 credits. Course limited to 15 students. Prerequisite: permission of the instructor on the basis of a writing sample (critical/interpretive prose), which should reach the instructor by the first day of class. S. Davis.

"Fictions" of voice, audience, plot, point of view, figurative language, and thought—abound in good expository writing; they stand out in works that deliberately test and play with ideas: dialogues, satires, parodies, parables, philosophic tales, and "thought-experiments." Students will write critically about such works and the issues they raise and will experiment with writing in similar forms. The "fictions" read and written in this course are not conventional realistic narratives or evocations of personal experience; they are the vehicles and animating resources of writers who want to argue flexibly, provoke thought, ridicule vice or folly, play games, answer questions, or involve readers in pleasingly or disturbingly insoluble problems. Readings will include such works as Plato's *Republic*, Swift's "Modest Proposal," and *Tale of a Tub*, Voltaire's *Candide*, Carroll's Alice books, short fictions by Borges and Octavia Butler, essays by Richard Rorty and Anthony Appiah, selections from Wittgenstein's *Philosophical Investigations*, and Stoppard's *Dog's Hamlet*, *Cabot's Macbeth*.

**ENGL 387 Autobiography: Theory and Practice**

Spring. 4 credits. A. Boehm.

In this nonfiction prose-writing seminar we explicate canonical autobiographies as models of rhetoric to be imitated in weekly writing assignments.

**Engl 388 The Art of the Essay**

Fall. 4 credits. Limited to 15 students. Interested students should submit one or more pieces of recent writing (prose) to Prof. Fakundiny before the beginning of the term, preferably at preregistration. L. Fakundiny.

For both English majors and nonmajors who have done distinguished work in freshman writing seminars and in such courses as English 280-281, 288-289, and who desire

intensive practice in writing essays as a kind of creative nonfiction. The course assumes a high degree of self-motivation, a capacity for independent work, and critical interest in the work of other writers; it aims for a portfolio of conceptually rich and stylistically polished writing.

**ENGL 389 The Expository Essay**

Spring. 4 credits. C. Levy.

For both English majors and nonmajors who have done well in freshman writing seminars or have taken English 288 or similar courses, and who desire intensive practice in writing essays. Particularly recommended for students planning careers in such professions as law, publishing, and journalism, in industry, and in many academic specialties. The principal, but not exclusive, emphasis of the seminar will be on expository techniques of analysis and persuasion; members will write weekly essays on topics of their choice, typically three to four pages in length. Interested students should submit writing samples to the instructor before the semester begins, preferably during course scheduling.

**Creative Writing**

Students usually begin their work in Creative Writing with English 280 or 281, and only after completion of the Freshman Writing Seminar requirement. Please note that either English 280 or English 281 is the recommended prerequisite for 300-level creative writing courses. English 280 and 281 may satisfy a distribution requirement in your college (please check with your college adviser). English 382-383, 384-385, and 480-481 are approved for the English major.

**ENGL 280-281 Creative Writing**

Fall, spring, summer, winter session. 3 credits. Prerequisites: completion of the Freshman Seminar requirement. Limited to 18 students.

**Majors and prospective majors, please note.** Although recommended for prospective English majors, English 280-281 cannot be counted towards the 36 credits required for completion of the English major. It is a prerequisite for 300-level courses in writing, which count towards the major. English 280 is not a prerequisite for English 281.

An introductory course in the theory, practice, and reading of prose, poetry, and allied forms. Students are given the opportunity to try both prose and verse writing and may specialize in one or the other. Many of the class meetings are conducted as workshops.

**ENGL 382-383 Narrative Writing**

Fall, 382; spring, 383. 4 credits each term. Each section limited to 15 students.

Previous enrollment in English 280 or 281 recommended. Prerequisite: permission of instructor, normally on the basis of a manuscript. Fall: Sec. 1, S. Vaughn; sec. 2, D. McCall; sec. 3, M. McCoy. Spring: D. McCall, L. Herrin, M. Koch.

The writing of fiction; study of models; analysis of students' work.

**ENGL 384-385 Verse Writing**

Fall or summer, 384; spring, 385. 4 credits each term. Each section limited to 15 students. Prerequisites: English 280 or 281, or permission of instructor. Fall: P. Janowitz, L. Powell. Spring: A. R. Ammons.

The writing of poetry; study of models; analysis of students' poems; personal conferences.

#### **ENGL 480-481 Seminar in Writing**

Fall: 480; spring 481. 4 credits each term. Each section limited to 15 students. Students are encouraged to take English 280 or 281 and at least one 300-level writing course. Prerequisites: permission of instructor, normally on the basis of a manuscript. Fall: Sec. 1, L. Herrin; sec. 2, S. Vaughn. Spring: M. McCoy, S. Vaughn. Intended for those writers who have already gained a basic mastery of technique. Although English 480 is not a prerequisite for 481, students normally enroll for both terms and should be capable of a major project—a collection of stories or poems, a group of personal essays, or perhaps a novel—to be completed by the end of the second semester. Seminars are used for discussion of the students' manuscripts and published works that individual members have found of exceptional value.

### **Courses for Freshmen and Sophomores**

These courses have no prerequisites and are open to freshmen and non-majors as well as majors and prospective majors. Students may take up to four 200-level courses for credit toward the English major.

### **Introductions to Literary Studies**

#### **ENGL 201-202 The English Literary Tradition #**

**201:** Fall. 4 credits. Open to undergraduates who have completed the freshman writing requirement. English 201 is not a prerequisite for 202. This course may be used as one of the three pre-1800 courses required of English majors. G. Teskey. An introduction to the study of English literature, examining its historical development and many of its highest achievements. Works to be read include *Sir Gawain and the Green Knight*; selections from Chaucer's *Canterbury Tales* and Spenser's *Faerie Queene*; Shakespeare's *Henry IV, Part I* and *King Lear*; poems by Jonson, Donne, and Herbert; and selections from Milton's *Paradise Lost*.

**202:** Spring. 4 credits. F. Bogel. A survey of English literature from the late seventeenth century to the early twentieth century, including poetry and some prose works from the Restoration and eighteenth century, the Romantic period, the Victorian period, and Modernism. Lectures and discussion sections.

#### **ENGL 204 Mostly Poems and Stories**

Spring. 4 credits. F. Bogel. Introduction to the pleasures of close reading, with special emphasis on analyzing the forms, structures, and rhetorical dynamics that characterize poems, prose narratives, and drama and contribute to their appeal. The syllabus will include works from older as well as more recent periods. This semester, we are likely to study poems by (among others) William Shakespeare, Robert Herrick, John Keats, Robert Browning, Christina Rossetti, Sylvia Plath, Ted Hughes, and Elizabeth Bishop; stories by Isabel Allende, Flannery O'Connor, James Baldwin, Toni Cade Bambara, and Beth Nugent; and such novels as Austen's *Pride and Prejudice* and Morrison's *The Bluest Eye*.

#### **ENGL 208 Shakespeare and the Twentieth Century (also Comparative Literature 208)**

Spring. 4 credits. B. Correll. What is the relationship between Shakespeare's plays in their own time and the various ways they have functioned in modern culture? We will compare selected works of Shakespeare with their adaptations in fiction, theater, film, the educational system, government, and popular culture. The discussion of each play will be organized around one or more critical approaches. The course as a whole will attempt to provide a systematic introduction to the contemporary study of literature and culture.

#### **ENGL 227 Shakespeare**

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. (Majors and nonmajors, see also ENGL 327.) G. Teskey.

A survey of Shakespeare's career as a dramatist and in particular of his development in the genres of comedy and tragedy. The course serves as an introduction to the major in English.

### **Major Genres and Areas**

#### **ENGL 203 Major Poets**

Spring. 4 credits. R. Gilbert. Intensive reading in the work of eight to ten poets chosen to represent important periods and modes of poetry. Poets to be studied may include William Shakespeare, (the sonnets), Andrew Marvell, Alexander Pope, John Keats, Emily Dickinson, Robert Browning, Gwendolyn Brooks, and Seamus Heaney.

#### **[ENGL 205 Readings in English Literature**

To be offered 1999-2000.]

#### **ENGL 206 Readings in English and American Literature**

Spring. 3 credits. **This course is intended for non-majors.** Two lectures and one discussion section each week. P. Sawyer.

Covers literature since the nineteenth century. A typical reading list will include novels by Austen, Emily Bronte, Hardy, James, Faulkner, and Morrison; poems by Keats, Browning, Hopkins, Frost, and Plath; plays by Wilde and Stoppard.

#### **ENGL 207 Readings in Modern Poetry**

Fall. 4 credits. D. Fried. This course will sample the vast array of poetic modes and forms employed over the past century and a half, with primary emphasis on the work of British and American poets. Our focus in the course will be on the poems themselves—how they feel, sound, look, mean, and behave. Lectures, discussions, and written assignments will emphasize both the craft of writing poetry and the discipline of reading it with understanding and appreciation. No previous study of poetry required.

#### **ENGL 209 Introduction to Cultural Studies**

Fall. 4 credits. B. Correll. Ads, advice columns, TV talkshows, music videos, films, and more bombard our thoughts and senses with their encoded messages. This course will look at the relationships between literature and culture and introduce students to the kinds of cultural forms we encounter in

our everyday lives and to some of the critical work that has been written about them. Examples will come from a range of texts, both "high" and "low," contemporary and historical. The course will follow a lecture-discussion format.

#### **ENGL 210 Medieval Romance: The Voyage to the Other World**

Spring. 3 credits. This course is intended for nonmajors. C. Kaske. The course will survey some medieval narratives concerned with representative voyages to the other world or with the impinging of the other world upon ordinary experience. The syllabus will normally include some representative Old Irish other world literature: selections from *The Mabinogion*; selections from the *Lais* of Marie de France; Chretien de Troyes's *Erec*, *Yvain*, and *Lancelot*; and the Middle English *Sir Gawain and the Green Knight*. We will finish by looking at a few later other world romances such as selections from J. R. R. Tolkien. All readings will be in modern English. Requirements: three brief (two to three typed pages) papers and a final exam designed to test the students' reading.

#### **ENGL 253 The Modern Novel**

Fall. 4 credits. J. Ashton. In this course we will read some of the most famous and groundbreaking novels of the 20th century, asking, among other things, what makes them "modern." Works will include Joseph Conrad's *The Secret Agent*, Virginia Woolf's *Mrs. Dalloway*, Richard Wright's *Native Son*, Gertrude Stein's *Ida*, Ralph Ellison's *Invisible Man*, Thomas Pynchon's *The Crying of Lot 49*, Angela Carter's *The Infernal Desire Machines of Dr. Hoffman*, and several others.

#### **[ENGL 255 African Literature**

Spring. 4 credits. To be offered 1999-2000. B. Jeyifo.]

#### **ENGL 260 Introduction to American Indian Literatures (also American Studies 260)**

Fall. 4 credits. K. Shanley. An introduction to Native American literatures, we read a variety of genres—novels, short fiction, autobiography, poetry, oral traditions—spanning Indian publications through the last two centuries. Issues arising from the texts include aesthetics of orality and literacy; cultural change and survival; colonial identity politics; mythic histories; world views and ideologies; and contemporary tribal sovereignty. A goal of the course is to read historical American contexts through the eyes of Native American texts.

#### **ENGL 262 Asian American Literature (also Asian American Studies 262 and American Studies 262)**

Fall. 4 credits. S. Wong. This course will introduce students to a range of writing by Asian Americans and to some critical issues concerning the production and the reception of Asian American texts. In reading through selected works of prose, poetry, and drama, we will be asking questions about the relation between literary forms and the sociohistorical context within which they take on their meanings, and about the historical formation of Asian American identities.

**[ENGL 264 Ethnic Literature: Bridges and Boundaries]**

Spring. 4 credits. To be offered 1999–2000. K. Shanley and S. Wong.]

**[ENGL 265 Contemporary African American Literature]**

4 credits. To be offered 1998–99.]

**ENGL 274 Scottish Literature and Culture #**

Fall. 3 or 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. The course may be taken for 3 or 4 credits; those taking it for 4 credits will complete an additional writing project. This course only counts towards the English major when taken for 4 credits. Non-majors are welcome. Enrollment limited to 20.

T. Hill and H. Shaw.

Scotland was an independent kingdom during most of its history. Although it is now politically united with England, it preserves its cultural distinctiveness. This course provides an introduction to Scottish literature and its cultural context. We will focus on important Scottish literary texts, with special emphasis on the medieval period and the eighteenth and nineteenth centuries. The course should appeal to those who wish to learn more about their Scottish heritage, to those who wish to view in a new perspective works normally considered monuments of "English" literature, and to those who simply wish to know more about a remarkable culture and the literature it produced. Some of the texts will be read in Scots, but no familiarity with Scots or earlier English is presumed. Authors studied will include Henryson, Dunbar, Anonymous (the Scottish Ballads), Hume, Burns, Scott, Hogg, Stevenson, and Grassie Gibbon.

**ENGL 275 The American Literary Tradition (also American Studies 275)**

Fall and spring. 4 credits. Fall, B. Maxwell; spring, H. Spillers.

The problem of an American national literature is explored through the reading, discussion, and close analysis of texts across the range of American literary history. Not a survey, this course focuses on the relations of the texts to each other, the shaping of national identities in those relationships, and the assumptions about history, language, and the self that underlie them.

**Engl 287 Literature and Science**

Spring. 4 credits. J. Ashton.

In a 1959 lecture entitled "Two Cultures," British novelist C. P. Snow characterized the relationship between the disciplines of science and literature as one of cultural difference. In this course we will explore some of the background to Snow's claims in debates from the late 19th and early 20th century over the relationship between facts and values, objectivity and subjectivity, logic/rationality and the imagination. We will also examine some of the consequences of the "Two Cultures" argument in contemporary debates over what is and isn't, what should and shouldn't be, the relationship between science and literature. We will address these problems through our analysis of stories, novels, poems, and essays that explore the interactions—both collaborative and conflictive—between science and literature, beginning in the 1880s with Matthew Arnold and Thoms Huxley's debate over the relative values of humanistic and scientific studies in

the college curriculum, and ending with the very recent debates over "cultural relativism" sparked by sociobiologist Edward O. Wilson's claims for the coevolution of genes and culture in *Consilience: The Unity of Knowledge* (1998).

**ENGL 295 The Essay in English #**

Fall. 4 credits. Prerequisite: completion of freshman seminar requirement. This course may be counted as one of the three pre-1800 literature courses required of English majors. L. Fakundiny.

What is an essay and what is it for? How does it work as prose discourse, as a text of the self? Impelled by such generic questions and others raised by Montaigne's *French Essays* (1588), this course explores the invention of the essay in English during the sixteenth and seventeenth centuries and its flowering in the periodicals and magazines of the eighteenth and nineteenth centuries. Readings include selections from the work of Bacon, Cornwallis, Donne, Earle, Cowley, Temple, Swift, Addison, Johnson, Franklin, Goldsmith, Lamb, Hazlitt, Irving, and DeQuincey. Essays by earlier writers are matched rhetorically and/or thematically with readings from more recent practitioners of the genre including Dubois, Woolf, Orwell, Welty, Baldwin, Selzer, Ozick, Achebe, Didion, S. Naipaul, Dillard, Sanders, and others. This is a course for students interested in reading essays and in thinking about how this nonfiction prose genre developed and how it works. No special background in literary history is assumed.

**ENGL 298 Ethics and Literature**

Spring. 4 credits. S. Mohanty.

This introductory and multicultural course draws on novels, films, short philosophical works, and stories from a variety of cultures to explore basic ethical issues and problems. It focuses on what matters to us and why, examining how these texts formulate some of the familiar questions that arise in our daily lives: How will my action affect my friend? Am I being fair to her? Am I being fair to myself? Why should I think about the welfare of others? What kind of a life should I try to live?

Readings from Plato and Nietzsche to Toni Morrison and Nadine Gordimer, from the *Bhagavad Gita* to contemporary feminist and antiracist stories, films, and videos. No formal training in philosophy or literary analysis will be presumed. Lecture-discussion. Two papers and several short written assignments.

**Special Topics****ENGL 263 Studies in Film Analysis**

Fall and spring. 4 credits. Enrollment limited to 20 students. Preference given to English majors. L. Bogel.

Fall: Special topic: **Interpreting Hitchcock.** Through detailed analysis of at least twelve of Hitchcock's major films—from British silents such as *The Lodger* and the British talkies of the 30's (*The Thirty-Nine Steps*) to the early 40's work in Hollywood (*Spellbound*, *Notorious*), and major American films of his late period (*Rear Window*, *The Birds*)—we will consider Hitchcock as a major technical and stylistic innovator in the history of cinema. As texts for psychoanalytic and feminist approaches to study, his films invite questions about film language, the ethics of

spectatorship, and the nature of desire and sexuality. Frequent short essays and viewing exercises encourage students to engage through their writing the course's critical concerns. **Students must be free to attend regular evening screenings and video showings of the films once or twice a week. Lab fee.**

**Spring: Special topic: Interpreting Melodrama and the Woman's Film of the 40s and 50s.**

With some attention to melodrama's roots in nineteenth-century fiction and theatre and in twentieth-century women's fiction and popular Freudianism, we will work to define Hollywood's melodrama as both a genre and a way of viewing the world. Psychoanalytic and feminist analyses of melodrama will help us pose larger questions about gender and culture, about gendered spectatorship, about the relation of these films to American culture, about Hollywood's changing constructions of "woman," the "maternal," and the "feminine," and questions about desire, pleasure, fantasy, and ideology in relation to the melodramatic heroine. Required weekly, evening screenings of such films as: *Picnic*, *Now, Voyager*, *Rebecca*, *Mildred Pierce*, *The Women*, *Imitation of Life*, *Gilda*, *Leave Her to Heaven*, *Gaslight*. Regular critical readings, frequent viewing questions, two longer essays, no exam. Students must be free to attend regular evening screenings and video showings of the films once or twice a week. Lab fee.

**ENGL 268 The Culture of the 1960s**

Spring. 4 credits. P. Sawyer.

This course argues that the 1960s helps define the 1990s, but that as we look back, the 1990s helps define the 1960s. Were the Sixties a time of dangerous experimentation with drugs, sex, and alternative lifestyles on the part of a pampered generation that gradually learned to straighten up and join the mainstream? Or was it a time of revolutionary hopefulness, when the civil rights movement and the Vietnam War stimulated an impassioned critique that changed American society? What can the experiences of young "boomers" contribute to a later generation, the last of the twentieth century? The course explores these and other questions by focusing on the topics of racial justice, war, the counterculture, the New Left, and the woman's movement. Texts will include *The Autobiography of Malcolm X*, *The Electric Kool-Aid Acid Test*, *Dispatches*, the poems of Allen Ginsburg and Adrienne Rich, films, music, speeches, manifestos, and memoirs. The term paper will explore students' special interests.

**ENGL 277 Folklore and Literature**

Fall. 4 credits. A. Lurie.

An introduction to British and American folklore: folk speech and slang, rhymes, riddles, jokes, ballads, songs, legends, fairy tales, ghost stories, and customs and festivals; plus reading of British and American poetry and fiction that uses these forms and themes. Students will also learn how to collect and analyze contemporary folklore.

**[ENGL 279 Lesbian Personae (also Women's Studies 279)]**

4 credits. To be offered 1999–2000.]

**[ENGL 291 American 1920s: Literature and Culture (also American Studies 291)]**

4 credits. To be offered 1999–2000.]

## Courses for Sophomores, Juniors, and Seniors

Courses at the 300 level are open to sophomores, juniors, and seniors and to others with the permission of the instructor.

### ENGL 301 Mind and Memory

Spring. 4 credits. D. Ackerman.  
Creativity is the attribute of the mind that enables us to make new combinations from often-familiar information, to perceive analogies and other linkages in seemingly unlike elements, to seek for syntheses. As is true of all learning, creativity is dependent upon memory—a memory that is genetic and social as well as personal and experiential. This course will explore the nature of creativity in science and art, indicating the differing requirements for discovery in the disparate disciplines while demonstrating the commonality that underlies the creative process and binds (say) physicist or mathematician to poet, composer, visual artist.

The opening sessions will be concerned with the crucial role of memory in learning, discovery, and spiritual insight for all humans, and will make reference to recent scientific research into the complex nature of the human brain, including its intimate connections with the rest of the body. Following this introduction, the course will rely on weekly guests from as many disciplines in the arts and sciences as possible, faculty members who will discuss (for interested undergraduates, whatever field they may be preparing to enter) the process underlying their research, or their work as creative or performing artists. The guests will be asked to speak of their goals, the problems they have faced, and what they have learned from their disappointments as well as their achievements.

Members of the course are encouraged to enroll in another course or be engaged in an activity (research or artistic production or performance) in which the insights gained in this class can be applied or tested. To further abet the active participation so necessary to learning, students will be asked to keep a journal, one that summarizes their understanding of, and response to, each presentation by a guest lecturer—a journal that will serve as a continuing record of their experiences as members of the course, and that will become the basic resource for an essay, to be submitted at the semester's end, that will give their carefully considered assessment of the applicability of what they have learned in this course to that second course or activity, to their own mental processes, and to the future they propose for themselves.

### ENGL 302 Literature and Theory (also English 602 and Comparative Literature 302 and 622)

Fall. 4 credits. J. Culler.  
Study of issues in contemporary theoretical debates, with particular attention to structuralism, deconstruction, psychoanalysis, and feminism. Readings by Roland Barthes, Judith Butler, Jacques Derrida, Michel Foucault, Barbara Johnson, Jacques Lacan and others. No previous knowledge of literary theory is assumed.

### [ENGL 308 Icelandic Family Sagas 4 credits. To be offered 1999-2000.]

### ENGL 311 Old English (also English 611)

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. T. Hill.  
This course will provide a grounding in the Old English language, and precede the reading of some major texts in poetry, such as *The Wanderer* and *The Battle of Maldon*. No previous knowledge of Old or Middle English is required or expected. There will be both a mid term and a final, plus oral reports. Students will be encouraged to follow their own interests. Graduate students will be expected to do a substantial paper, or other research exercise.

### ENGL 312 Beowulf (also English 612)

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. One semester's study, or the equivalent, of Old English is a prerequisite. T. Hill.  
A close reading of *Beowulf*. Attention will be given to relevant literary, cultural, and linguistic issues.

### ENGL 319 Chaucer

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. R. Farrell.  
This course will begin with the study of the major *Canterbury Tales*, and some of Chaucer's minor works, such as *The Book of the Duchess*. All works will be read in Middle English, but ample time will be devoted to learning the language, for it is impossible to read Chaucer as a poet without Middle English. There will be lectures on Chaucer's life, society, literary and religious content. There will be take home mid- and end-of-term exams, and student presentations.

### ENGL 320 Literature of the English Renaissance (1500-1660) #

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. B. Adams.  
Verse and prose (principally non-dramatic) from More to Milton, including selected works of Skelton, Wyatt, Surrey, Sidney, Spenser, Marlowe, Shakespeare, Jonson, Donne, Herbert, Bacon, Marvell, Suckling, Lovelace, Burton, and Browne. Contexts (political, social, intellectual, religious) as well as texts.

### ENGL 321 Spenser and Malory #

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. Informal lecture and discussion. Two papers, no exams. C. Kaske.  
Paired selections covering about half of Malory's *Morte d'Arthur* and half of Spenser's *Faerie Queene*. Chretien's romances, *Sir Gawain and the Green Knight* and some of Spenser's minor poems will be mentioned occasionally as background. Comparisons will assess possible literary influence, the distinctive genius of each author as a writer of romance, and the development of Arthurian romance from the Middle Ages to the Renaissance.

### [ENGL 325 The Culture of the Renaissance II (also Comparative Literature 362, and History 364) # 4 credits. To be offered 1999-2000.]

### ENGL 326 Medieval and Renaissance Theatre (also Theatre Arts 332 and Comparative Literature 332)

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. J. E. Gainor.  
For complete description, see Theatre Arts 332.

### ENGL 327 Shakespeare

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. Limited to 25 students. C. Levy.  
For both non-majors and majors in English who wish to encompass the reading and small-class discussion of some ten representative plays in the work of a single semester.

### ENGL 328 The Bible

Spring. 4 credits. G. Teskey.  
An introduction to the Bible as what William Blake called "the great code of art." The King James (Authorized) Version (1611) will be used.

### ENGL 329 Milton #

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. G. Teskey.  
An introduction to the life, poetry, and thought of John Milton, the most important English poet after Shakespeare.

### ENGL 330 Restoration and Eighteenth-Century Literature #

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. N. Saccamano.  
Close reading of texts in a variety of genres (poetry, fiction, drama, autobiography) will be guided by such topics as the nature of satire, irony, and mock-forms; the languages of the ridiculous and the sublime; the authority and fallibility of human knowledge; connections among melancholy, madness, and imagination. Works by such writers as Rochester, Dryden, Swift, Gay, Defoe, Johnson, Boswell, Sterne, and Cowper.

### ENGL 333 The Eighteenth-Century English Novel #

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. R. Bogel.  
A study of form and theme in the British novel tradition. The course focuses on representative novels mostly from the eighteenth century, paying close attention to language and structure but also to cultural contexts and to the development of the novel form itself. We explore such topics as truth and fiction; romance, realism, satire, and the gothic; heroic and mock-heroic modes; sentiment, sensibility, and sexuality; race and gender; and the forms and uses of narrative. Readings may include Behn's *Oroonoko*, Defoe's *A Journal of the Plague Year*, Richardson's *Clarissa*, Fielding's *Joseph Andrews*, Cleland's *Memoirs of a Woman of Pleasure*, Johnson's *Rasselas*, Walpole's *The Castle of Otranto*, Sterne's *Tristram Shandy*, Mackenzie's *The Man of Feeling* and Austen's *Pride and Prejudice*.

### [ENGL 335 European Drama 1660-1900: Molière to Ibsen (also Comparative Literature 336) 4 credits. To be offered 1999-2000.]



**ENGL 340 The English Romantic Period #**

Fall. 4 credits. R. Parker.

Readings in various writers from the late 1780s through the 1820s—among them Blake, Wordsworth, Wollstonecraft, Coleridge, Byron, Mary Shelley, Percy Shelley, and Keats—with major emphasis on poetry but substantial collateral attention also to prose fiction, drama, letters, and political and literary surveys. The course will be concerned both with formal experiments in narrative, lyric, and dramatic representation and with analyses of political and cultural issues and contexts in an age of national reform and international revolution and conflict.

**ENGL 345 Victorian Controversies**

Spring. 4 credits. S. Siegel.

Economic, political and technological changes transformed the nineteenth century. We will consider some of the controversies these transformations provoked in England and Ireland. Our readings will be selected chiefly from leading nineteenth-century periodicals and from essays that contributed greatly to shaping public opinion. We will explore the social problems Victorian critics and artists identified, the various solutions they proposed, and their contrasting visions of their nation and its colonies. The men and women who contributed to the periodical press, and who shaped literary culture and anticipated new cultural forms, were preoccupied with urgent questions about themselves: Was their century marked by progress or by decline? Would machines degrade or ennoble workers? Did aesthetic experience complement or compete with religious doctrine? Were art and science dependent upon or opposed to each other? Should all forms of expression be permitted or should certain forms be censored? Should the colonies be permitted to rule themselves or remain dependent on England? Would prestige be gained if institutions of higher learning awarded degrees to women? Was "manliness" revealed through "character" or through "behavior"? In addition to these intellectual conflicts, we will be attentive to the emergence of new visual forms that participated in and provoked controversy. Accordingly, we will view photographs and descriptions of England's great Crystal Palace Exhibition of 1851. We will consider the objections such displays aroused, as well as the emergence of new and controversial fashions in painting, in clothing, in interior design, and in home furnishings. Authors will include Arnold, Browning, Eliot, Morris, Pater, the Rossettis, Ruskin, Shaw, Swinburne, Wilde, and Yeats. Classes will be taught by lecture and discussion. Examinations will be in-class and take-home exercises.

**Engl 347 Freud and Reading**

Spring. 4 credits. M. Jacobus.

This course will offer an introduction to Freud's writings, and to his psychoanalytic legacy, focusing on Freud as both writer and reader, while also exploring his enduring interest for students of literature and culture (and literary theory) today. Well served by his early translators, Freud has long been an object of fascination to literary critics and close-readers, as well as the source of a significant body of psychoanalytic and literary theory. We will look both at early "novella"-style works such as *Studies on Hysteria* and at the case-histories of Little Hans, Dora, Schreber, and the Wolf Man, with an eye to Freud's narrative skill and persuasive art, as

well as at subsequent readings that take issue with or illuminate his arguments, theories, and mode of analysis. Alongside the case-histories, we will explore The Interpretation of Dreams and some of the influential readings of the dream-text to which it later gave rise. We will also read Freud's writings on literature and art, including "Delusion and Dream" in Jensen's *Gradiua* (his extended reading of a novel), along with his writings on daydreaming, telepathy, negativity, and the uncanny. We will end with his response to the First World War in *Beyond the Pleasure Principle* and his thoughts about culture in *Civilization and its Discontents*. The emphasis will be on what Freud's writing offers for literary and cultural studies, and on the ways in which his ideas were both shaped by and shaped twentieth-century European literary culture.

**ENGL 350 The Modern Tradition I: 1890-1930**

Fall. 4 credits. D. Schwarz.

Critical study of major works by Hardy, Conrad, Lawrence, Joyce, Woolf, Eliot, Yeats, Hopkins, Wilde, Wallace Stevens and others. While the emphasis will be on close reading of individual works we shall place the authors and works within the context of literary and intellectual history. The course will seek to define the development of literary modernism (mostly but not exclusively in England), and relate literary modernism in England to that in Europe and America as well as to other intellectual developments. We shall be especially interested in the relationship between modern literature and modern painting and sculpture; on occasion, we shall look at slides.

**ENGL 351 The Modern Tradition II**

Spring. 4 credits. S. Siegel.

This course will consider the relation of modernists literary expression to the violence and ideological upheavals of the first half of the century. Readings will include Imagist and Surrealist Manifestos; the social and political writings of the Bloomsbury Group; the emergence and elaboration of dream theory, psychoanalysis, and literary Expressionism. Readings will include T. E. Hulme, Ezra Pound, and Wyndham Lewis; Lytton Strachey, Virginia Woolf, and G. E. Moore; Freud, Jung, and Winnicott; Yeats, Lady Gregory, and Shaw.

**[ENGL 353 Postcolonial Literature: Caribbean literature]**

To be offered 1999-2000.]

**[Engl 355 Decadence (also Comparative Literature 355 and Women's Studies 355)]**

4 credits. To be offered 1999-2000.]

**[ENGL 356 Postmodernist Fiction]**

4 credits. To be offered 1999-2000.]

**ENGL 361 Early American Literature (also American Studies 361)**

Fall. 4 credits. This course may be used

as one of the three pre-1800 courses required of English majors. J. Porte. American literature and culture from the 1630's to the 1830's, including some of the following: prose and poetry of the Puritans (Winthrop, Bradford, Bradstreet, Rowlandson, Taylor, Cotton Mather; also study of the witchcraft phenomenon); Edwards and Franklin; Jefferson; Crèvecoeur; Rebecca Rush's Kelroy; selections from Irving's Sketchbook; the writing of William Apess; the poetry of Bryant; a novel by James Fenimore

Cooper; the early work of Emerson and Hawthorne.

**[ENGL 362 The American Renaissance (also American Studies 362)]**

4 credits. To be offered 1999-2000.]

**ENGL 363 The Age of Realism and Naturalism (also American Studies 363)**

Spring. 4 credits. J. Goldsby.

Literary history tells us that realism and naturalism were aesthetic movements that emerged in American fiction at the turn of the 19th century. Cultural histories of the era tell us social ideals about what constituted the "real" and the "natural" were debated by Americans as they coped with the revolutionary changes that turned their worlds upside down between the Civil and First World Wars.

This course moves between these two accounts in order to appreciate the varied styles and issues that comprised the literature of American realism at the turn of the 19th century. Principal authors may include: Charles Chesnut, Stephen Crane, Theodore Dreiser, William Dean Howells, Henry James, Mark Twain, and Edith Wharton.

**[ENGL 364 American Literature Between the Wars (also American Studies 364)]**

4 credits. To be offered 1999-2000.]

**ENGL 365 American Literature Since 1945 (also American Studies 365)**

Fall. 4 credits. B. Maxwell.

An American Studies approach to the literature of 1945-1960, the early Cold War period of "perpetual crisis and the garrison-prison state" (Harold Lasswell). Themes will include fear, glamour, domestic life, integration, the "white negro," addiction, loyalty, bureaucracy, and the disposition in the United States of the legacies of the Depression and of World War II. Fiction by Saul Bellow, Nelson Algren, Ann Petry, Ralph Ellison, Tillie Olsen, and Jack Kerouac (among others); collateral readings in memoir (Hellman), sociology (Mills), social psychology (Erickson; Adorno and Horkheimer), history (Hofstadter), aesthetics (Greenberg), politics (Kennan; Arendt), feminism (Friedan), and self-advertisement (Mailer). Some attention to bop, poetry, painting, film noir, political speeches, stand-up comedy, and magazine culture. (Note: This course is substantially different from the Spring 1998 version of Engl/Amst 365.)

**ENGL 366 The Nineteenth-Century American Novel (also American Studies 366)**

Fall. 4 credits. D. McCall.

A study of American fiction in its first flowering. This course will include such major works as Hawthorne's *The Scarlet Letter*, Melville's *Moby-Dick*, James's *The Portrait of a Lady*, and Mark Twain's *Adventures of Huckleberry Finn*.

**ENGL 370 The Nineteenth-Century English Novel (also Women's Studies 370)**

Spring. 4 credits. E. Hanson.

This course offers a survey of canonical British novels of the nineteenth century. Victorian novels are notorious for their marriage plots, narratives that presume that marriage or suicide is the only fate appropriate for the heroine; nevertheless, the best of these novels offer rich insights into the psychology and social condition of women, as well as

complex meditations on the social dynamics of sexuality and gender. We will discuss the relationship of gender to language and literary forms, to reading and writing as a practice, to the politics of marriage and family life, to capital and property, and to the rhetoric of love and sexual desire. We will focus on a few of the most memorable heroines of the period as they appear in the novels of Jane Austen, Charlotte and Emily Brontë, William Makepeace Thackeray, George Eliot, and Thomas Hardy.

**ENGL 371 American Poetry to 1950 (also American Studies 371)**

Fall. 4 credits. R. Gilbert.

From its inception in the 17th century, American poetry in English has appeared strikingly different in form, language, and substance from that of other traditions. In this course we'll try to identify some of the qualities that have distinguished American poetry as a whole, while also focusing on the distinctive traits of a number of important individual poets. Figures to be studied will include Walt Whitman, Emily Dickinson, Robert Frost, Ezra Pound, T. S. Eliot, H. D., Wallace Stevens, William Carlos Williams, Marianne Moore, Langston Hughes, and Hart Crane.

**[ENGL 372 English Drama to 1700 (also Theatre Arts 372)]**

4 credits. To be offered 1999-2000.]

**[ENGL 373 English Drama from 1700 to the Present (also THETR 373)]**

4 credits. To be offered 1999-2000.]

**ENGL 374 Nineteenth-Century American Women Writers (also Women's Studies 374 and American Studies 374) #**

Spring. 4 credits. Staff.

In this cross-cultural examination of nineteenth-century American women writers, we will contrast a variety of nineteenth-century works of fiction, political/feminist manifestos, and slave narratives. We will investigate the ways in which these writers used their texts to construct culturally valuable and authentic selves. We will also consider tensions between "sentimental" idealism and political pragmatism, passionless femininity and expressed sexuality, restrictive domesticity and dangerous but vital autonomy. Readings will include works by authors such as Louisa May Alcott, Lydia Marie Child, Kate Chopin, Sui Sin Far, Margaret Fuller, Pauline Hopkins, Sarah Winnemucca Hopkins, Frances Harper, Harriet Beecher Stowe, and Harriet Wilson.

**ENGL 375 Survey in African American Literature to 1917 (also American Studies 375)**

Fall. 4 credits. J. Goldsby.

This course surveys the first half-century of African American novel production (1853-1912), with these as our founding propositions: what prompts African American authors to embrace the novel as a specific mode of expression in these years? How do they incorporate the major traditions of American novel writing (e.g., romanticism, sentimentalism, realism, naturalism, and modernism) into their aesthetic vocabularies? And how do the social fictions of race not only require but inspire these writers to invent narrative strategies that challenge the conventions of the novel as such? Authors will include Frederick Douglass, William Wells Brown, Harriet Wilson, Charles Chesnut, Pauline Hopkins, and James Weldon Johnson.

**ENGL 376 Survey in African American Literature: 1918 to present**

Spring. 4 credits. H. Spillers.

This course will select its readings from the genres of poetry, drama, fiction, and non-fiction produced by black American writers from the period of the Harlem Renaissance, to the present. Readings will include poems by Harlem Renaissance poets, the poets of African-American modernism, i.e., Gwendolyn Brooks and Robert Hayden, and some of the poetry of the Black Arts Movement of the 60s, by way of Leroi Jones/Imamu Baraka's and Larry Neal's *Black Fire*; plays by Lorraine Hansberry, Ed Bullins, and August Wilson; non-fictional and fictional writings by Malcolm X, Martin Luther King, Nella Larsen, Jean Toomer, Zora Neale Hurston, Toni Morrison, and Nate Mackey. (*Cane*, *The Autobiography of an Ex-Colored Man*, *Passing*, *The Autobiography of Malcolm X*, *Letter from an Birmingham Jail*, *Black Boy*, *Invisible Man*, *Flight to Canada*, *Oxherding Tales*, *Middle Passage*, *Jazz*, and *The Bedouin Hornbook* will be among the selected texts for the spring term.) The course is designed for majors, but will be open to all interested students.

**[ENGL 377 Gay Fiction (also Womns 376)]**

4 credits. To be offered 1999-2000.]

**ENGL 379 Reading Nabokov**

Fall. 4 credits. G. Shapiro.

For complete description, see Russian literature 385.

**ENGL 381 Reading as Writing**

See complete course description in section headed Expository Writing.

**ENGL 382-383 Narrative Writing**

See complete course description in section headed Creative Writing.

**ENGL 384-385 Verse Writing**

See complete course description in section headed Creative Writing.

**ENGL 386 Philosophic Fictions**

See complete course description in section headed Expository Writing.

**ENGL 388-389 The Art of the Essay**

See complete course description in section headed Expository Writing.

**[ENGL 390 Autobiography: Memoir, Memory, and History]**

4 credits. To be offered 1999-2000.]

**[ENGL 391 Irish Studies: Since the Eighteenth Century]**

4 credits. To be offered 1999-2000.]

**ENGL 393 Survey in U.S. Latina/o Literatures (also LSP 393)**

Fall. 4 credits. B. V. Olguin.

This course seeks to introduce students to the growing body of literature across time, space and genre (poetry, fiction, theater, performance art, testimonial narrative) that is being produced by the various Latina/o communities that have maintained or recently established a strong presence in the "United States of America." Concurrent with our study of literature as *belles lettres* the course will examine how Latina/o authors of various heritages—Chicano (Mexican American), Puerto Rican, Cuban American, Dominican American, Salvadoran American and "Mixed-Blood"—converge and diverge as they explore issues of race and class, gender and sexuality, as well as ideology, identity and

culture in general. For example, what is the relation of a given text to the history of the Latino group to which the author belongs? How do the various literary forms and formats deployed by Latina/o authors interact with particular historical exigencies such as the various Black, Native American and Latino Civil Rights Movements? What, for instance, is the significance of Spanish, Caló, Nahuatl, English and various forms of bilingualism and multilingualism in Chicano and "Nuyorican" verse in the 1960s? Furthermore, how are various paradigms of cultural nationalism revisited in subsequent eras by Latinas and Latinos? How is popular culture manifested in these texts, and what types of ideological statements are being made by these representations? What do these authors reveal about the limits of various sociological models of analysis such as notions of acculturation, assimilation, accommodation? What does post-modernism offer U.S. Latinos, or should this question be inverted? And, in general, how are various power relations-articulated along gender, race, class and culture-negotiated? Authors examined include Julia Alvarez, Lorna Dee Cervantes, Junot Díaz, Cristina García, Oscar Hijuelos, Cherrie Moraga, Willie Perdomo, Miguel Piñero, Tomás Rivera, Esmeralda Santiago, Helena María Viramontes, and others.

**[ENGL 394 Topics in American Indian Literature (also American Indian Studies 394 and American Studies 394)]**

4 credits. To be offered 1999-2000.]

**ENGL 395 Video: Art, Theory, Politics (also Theatre Arts 395)**

Fall. 4 credits. T. Murray.

The course will offer an overview of video art, alternative documentary video (which often incorporates styles of "video art") and new digital art over roughly the past thirty years. It will analyze four phases of video: 1) the development of video from its earliest turn away from television; 2) video's relation to performance art and installation; 3) video's incorporation in film through experiments in technology; 4) digital art's transformation of video. Screenings will include early political and feminist video, (from Ant Farm, Chip Lord, Martha Rosler, Joan Jonas, Lynn Hirshman, and Paper Tiger TV, etc.), conceptual video of the 80's and 90's (Woody Vasulka, Thierry Kuntzel, Mary Lucier, Bill Viola, Gary Hill, Steve Fagin, etc.), and gay and multicultural video of the 90's (Muntadas, Juan Downey, the Yonemotos, Jerry Tartaglia, Richard Fung, Pratibha Parmar, Marlon Riggs, Keith Piper, etc.). Secondary theoretical readings on postmodernism, video theory, multiculturalism, and documentary will provide students with a cultural and political context for the discussion of video style, dissemination, and reception.

**Courses for Advanced Undergraduates**

Enrollment in courses at the 400 level is generally limited by prerequisite or permission of the instructor.

**[ENGL 402 Literature as Moral Inquiry]**

4 credits. To be offered 1999-2000.]

**[ENGL 404 History into Fiction: Nazis and the Literary Imagination (also Comparative Literature 404 and German Studies 414)]**

4 credits. To be offered 1999–2000.]

**ENGL 405 The Politics of Contemporary Criticism**

Fall. 4 credits. S. Mohanty.

An introduction to some of the major issues in contemporary criticism and theory, with primary focus on such questions as: What is a (literary or cultural) text? What is interpretation and what are its limits? What views about knowledge, society, and politics underlie particular critical strategies and methodological choices? Drawing on representative essays and books from a variety of critical schools and traditions (from New Criticism to deconstruction, marxism, and feminism), we will examine the competing claims of the various positions and focus on the implications of answers to the above questions in actual critical analysis. Readings from Cleanth Brooks, Jacques Derrida, Michel Foucault, Hans-Georg Gadamer, Sandra Harding, Fredric Jameson, Toni Morrison, Barbara Herrnstein Smith, Charles Taylor, and Richard Rorty, among others. Two papers and a weekly journal.

**ENGL 406 Native and Nation (also Society for the Humanities 419)**

Spring. 4 credits. D. Moore.

For complete description, see Society for the Humanities 419.

**[ENGL 407 The Geography of Race (also Asian American Studies 407)]**

4 credits. To be offered 1999–2000.]

**ENGL 408 Poetry of the 1990s (also Comparative Literature 472, German Studies 472, and Spanish Literature 472)**

Fall. 4 credits. J. Monroe.

For complete description, see Comparative Literature 472.

**ENGL 409 The Poetics of Virtuality (Society for the Humanities 421)**

Spring. 4 credits. M-L Ryan.

For complete description, see Society for the Humanities 421.

**413 Middle English (also English 613)**

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. T. Hill.

This course surveys the literature of later medieval England, beginning with the cultural, literary, and linguistic collapse of standard Old English and proceeding to the age of Chaucer and perhaps a bit beyond. Readings will move through chronicles, homilies, lyrics, and acknowledged literary masterpieces such as *The Owl and the Nightingale*, the works of the Pearl poet, selections from *Piers Plowman*, and other poems from the "alliterative revival."

**ENGL 416 Chaucer and the Politics of Love**

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. W. Wetherbee.

The course will be organized around a reading of Chaucer's great narrative poem *Troilus and Criseyde*, in the context of late-medieval English social and sexual politics. Readings will include classical and medieval love-lyric and romance; Ovid's *Art of Love*; and medieval theorists of sexual and romantic love. Requirements for the course will include some practice in reading Chaucer aloud, one

or two in-class presentations, two short writing exercises and a term-paper.

**ENGL 417 Early Medieval Archaeology and Literature (also ENGL 617, ARCHEO 417, & ARCHEO 617)**

Spring. 4 credits. Permission of the professor is required, and the number of students will be limited to fifteen. This course may be used as one of the three pre-1800 courses required of English majors. R. Farrell.

The seminar will concentrate on the development of Iron Age societies to Early Christian communities in Ireland, England, and Scandinavia. The written records will be *Beowulf* and Bede's *Ecclesiastical History of England*, and the Sagas of *Grettir the Strong* and *Egil* from Scandinavia. All students will prepare oral reports, and there will be a take home midterm and final. Graduate students will be expected to do substantial research on their oral reports, and/or a research paper.

**ENGL 422 The Victorian and Edwardian Theatre (also Theatre Arts 435)**

Fall. 4 credits. J. E. Gainor.

For complete description, see Theatre Arts 435.

**ENGL 423 Seventeenth-Century Lyric**

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. Not open to sophomores. B. Correll.

The study of seventeenth-century English poets, major and minor, male and female, secular and religious, and the questions such study raises: What is the connection between lyric poetry and the conditions and conflicts of the seventeenth century? How did the writing and publication of poetry change in the period? How did women writers claim voices and change lyric poetry? What is the relationship between love poetry and religious lyric? Why did poets write about country houses, dead children, compasses, and coins? As our readings and seminar discussions will show, seventeenth-century poets were both products and producers of their culture. We will also read critical approaches to seventeenth-century poetry.

**ENGL 425 Elizabethan and Jacobean Drama (also ENGL 628)**

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. B. Adams.

Major comedies, tragedies, and tragicomedies by Shakespeare's principal contemporaries: Christopher Marlowe, John Lyly, Thomas Kyd, Ben Jonson, John Marston, John Webster, Thomas Middleton, John Fletcher, John Ford, and others.

**ENGL 427 Studies in Shakespeare: Gender, Sexuality, Cultural Politics**

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. B. Correll.

The seminar will focus on Shakespeare's drama and poetry to examine questions of gender and sexuality in their historical context. Texts will include *The Rape of Lucrece*, *Twelfth Night*, *The Merchant of Venice*, *Measure for Measure*, *The Taming of the Shrew*, *Hamlet*, *Othello*, *Antony and Cleopatra*, *Coriolanus*, *The Sonnets*. Discussions will address many issues: cross-dressing, masculine identity, the situation of women, royal politics, market economies, sumptuary law, anti-theatrical pamphlets. Students will also be introduced to representa-

tive critical approaches and debates in Shakespeare studies (feminist, new historical, queer, post-structuralist, psychoanalytic) and will write a critical research paper.

**ENGL 429 Readings in the New Testament (also Near Eastern Studies 429, Comparative Literature 429 and Religious Studies 429) #**

Fall. 4 credits. J. Bishop.

For complete description, see Comparative Literature 429.

**ENGL 432 Studies in the 18th Century: The Development of Print Culture**

Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. N. Saccamano.

This course will examine some of the ways that print technology and especially the marketing of books for an expanding public of readers affected literary practice and theory in eighteenth-century England. We will mostly focus on eighteenth-century literature of various genres—especially satire, the novel, and the periodical essay—but we will also study some recent work that addresses the legal, social, and cultural changes associated with print culture. Examples of questions we will explore: When literature is first considered to be intellectual property, how does the legal definition of an author as the "owner" of a literary text affect the relationship of writers to their works and their readers? Is there a connection between the new poetic category of "creative genius" and the new legal and economic category of intellectual property? How does the destination of printed books for an expanding reading public enable questions of aesthetic pleasure and "taste" to become dominant criteria of literary judgment? What is the relationship between "serious" and "popular" literature in print culture? How does the more widespread availability of books in print challenge traditional notions of "cultural literacy" (especially as identified with university education) as well as what counts as "literature" (especially in response to the novel)? How do writers obtain cultural authority when writing becomes a paid profession? As we address these issues, we will also explore some of the political implications of print culture that were first significantly addressed in England by Puritan revolutionaries in relation to the public status of the Bible. Authors will include Milton, Dryden, Defoe, Swift, Pope, Richardson, Johnson, and Young.

**[ENGL 433 The Invention of Humanity: Passion and Experience in the 17th and 18th Century]**

4 credits. This course may be used as one of the three pre-1800 courses required of English majors. To be offered 1999–2000.]

**[ENGL 437 Fictions of Apartheid and Modes of Liberalism @]**

4 credits. To be offered 1999–2000.]

**ENGL 438 Libertines and License (also French Literature 474)**

Spring. 4 credits. R. Parker.

The course will follow the progress of the libertine chiefly through a number of eighteenth- and early nineteenth-century English and French plays, novels, poems and graphic works, with particular interest in the aesthetic conventions and cultural contexts for representing the performance of intellectual, political, social and erotic excess, and transgression. Works (in translation where appropriate) by such writers and artists as

Molière, Wycherly, Behn, Marivaux, Richardson, Hogarth, Diderot, LaClos, Da Ponte, Schiller, Sade, Blake, Coleridge, Byron, Shelley, and Büchner.

**[ENGL 443 The Dandy in London and Dublin: 1790-1890]**  
4 credits. To be offered 1999-2000.]

**ENGL 444 The Novels of George Eliot**  
Fall. 4 credits. C. Chase.

Written under the name "George Eliot" by Mary Ann Evans between 1857 and 1878, *Middlemarch*, *Adam Bede*, *Daniel Deronda* and George Eliot's other novels are at the heart of the literary tradition in English. Eliot's first novel was the first deliberate practice of Realism, which she had defined and praised in a review of Ruskin's *Modern Painters*. Eliot's novels reveal the complex emotional and formal structures of realist fiction. How does literary invention, fiction, come to feel like history? And in what ways do women and men in a novel come to seem real, like Dorothea or Gwendolen Harleth or Maggie and her brother Tom? In this course we will study the construction and style of several major novels and explore some recurrent fantasies or themes that energize them. Writing requirements for the course will be two papers of ten pages each, with required revisions, and some shorter informal writing assignments.

**[ENGL 446 Victorian Poetry]**  
4 credits. To be offered 1999-2000.]

**[ENGL 448 The American Short Story]**  
4 credits. To be offered 1999-2000.]

**[ENGL 450 The History of the Book]**  
4 credits. To be offered 1999-2000.]

**ENGL 454 American Musical Theatre (also Music 490 and Theatre Arts 454)**

Spring. 4 credits. Prerequisite: English 272 or Theatre Arts 240-41. S. McMillin.  
A close reading of some seven or eight leading examples of the American musical, together with their sources, from *Showboat* to *Sweeney Todd*. A chronological approach will give a historical basis to the course, but the primary concern will be learning how to analyze musical drama and how to handle the problems and opportunities of interpretation integral to this complex theatrical form. Readings will include Rogers and Hammerstein's *Carousel* and its source, Molnar's *Liliom*; the Gershwins' *Porgy and Bess* and its source, Dubose Heyward's novel *Porgy*; Loesser and Burrows's *Guy and Dolls*, and its source, stories by Damon Runyon; Bernstein's *West Side Story* and its source, *Romeo and Juliet*.

**ENGL 459 Contemporary British Drama**  
Fall. 4 credits. S. McMillin.

The contemporary scene in English theatre, with special attention to Tom Stoppard (*Arcadia*, *Rosencrantz and Guildenstern are Dead*), Harold Pinter (*The Homecoming*, *Mountain Language*, *Moonlight*), and Caryl Churchill (*Vinegar Tom*, *Cloud Nine*, *Top Girls*), along with plays also by such writers as Julia Kane, David Edgar, Timberlake Wertenbaker, Edward Bond, and Peter Shaffer. The importance of the Royal Court Theatre, the effect of The National Theatre and The Royal Shakespeare Company, the role played by the Fringe, and the political impact of Thatcherism and its aftermath will be

important considerations.

**[ENGL 463 Problems in the Novel: Murder and Crimewriting]**  
4 credits. To be offered 1999-2000.]

**[ENGL 465 Proseminar in American Studies (also AmSt 465)]**  
4 credits. To be offered 1999-2000.]

**ENGL 466 James on Film**

Spring. 4 credits. D. Fried.  
Study of selected films adapted from Henry James's novels will necessarily involve close reading of the novels as well as examination of screenplay form, narrative in film and fiction, and larger questions of the expectations of moviegoers and readers. James's aspirations as a dramatist, his writings on theater and photography, and controversies about the interpretation of the novels will also be important in exploring how James's stories have been retold by filmmakers. The aim of the course is not to determine whether James has been justly served by the movies, but to take up the challenge of adapting his novels for film as an occasion for a detailed scrutiny of the conventions and resources peculiar to film and to prose fiction. Recurrent issues will include authorship and authority, point of view, levels of representation, visual and verbal style, acting and character, literary and filmic allusion, and relations between literature and the other arts. Works and films may include *Daisy Miller*, *The Turn of the Screw*, *The Innocents*, *Washington Square*, *The Heiress*, *The Bostonians*, *The Portrait of a Lady*, and *The Wings of the Dove*. To highlight the idiosyncratic problems of using Jamesian prose as the basis for film, there may be some attention to film adaptations of works by Edith Wharton and others.

**[ENGL 467 Studies in American Fiction: 1870-1915 (also American Studies 467)]**  
4 credits. To be offered 1999-2000.]

**ENGL 469 William Faulkner**  
4 credits. To be offered 1999-2000.]

**ENGL 470 Studies in the Novel: Reading Joyce's *Ulysses***

Spring. 4 credits. D. Schwarz.  
A thorough episode-by-episode study of the art and meaning of Joyce's *Ulysses*. We shall place *Ulysses* in the context of Joyce's canon, Irish culture, and literary modernism. We shall explore the relationship between *Ulysses* and other experiments in modernism—especially painting and sculpture—and show how *Ulysses* redefines the concepts of epic, hero, and reader. We shall discuss how *Ulysses* raises major issues in literary study and tests various critical and scholarly approaches. Such a self-conscious inquiry into theories and methods should prepare students to confront other complex texts. No previous experience with Joyce is required.

**[ENGL 471 American Indian Women's Literature (also Women's Studies 471 and American Indian Studies 471)]**  
4 credits. To be offered 1999-2000.]

**ENGL 473 American Indian Autobiography**

Fall. 4 credits. K. Shanley.  
Since first contact with Indigenous Americans, Europeans have been fascinated by the cultural differences between themselves and Native peoples. Within European American

thought, the symbol of "the Indian" has known a wide range of application—from culturally "other" to evolutionarily early European selves. That European fascination and Native Americans' need to tell "their side of the story" of American history have given rise to an immense body of Native American "autobiographies," often written in collaboration with European Americans. In this course we will survey a geographical and historical variety of Native American autobiographies and life stories, ranging from texts produced entirely by American Indians to texts that have undergone extreme alteration from the telling of the tale to the production of the book by its non-Indian editor. We will consider a wide range of issues raised by the texts—e.g., what is autobiography? What are Native attitudes toward the natural world, the roles of men and women in indigenous societies, and colonial and (post)colonial circumstances?

**ENGL 474 Contemporary African American Poetry**

Fall. 4 credits. Limited to 15 students. Admission by permission of instructor only. K. McClane.

African American poetry, like African American literature in general, has always served two masters, the artistic and the political. We will begin with the canonical works of Gwendolyn Brooks, Robert Hayden, and Imamu Amiri Baraka, three of America's most distinguished poets. From there we will read widely in contemporary African American poetry, including Mari Evans, Audre Lorde, Rita Dove, Ai, Nathaniel Mackey, Michael Harper, Lucille Clifton, Sonia Sanchez, and Ethelbert Miller. To increase our acquaintance with "new poetic voices" students will be asked to present a poet not included on our shared reading list. Clearly, one cannot understand African American poetry without appreciating the crucial historical and political movements that undergird it, including the assimilationist movement of the early 1940s and 1950s, the Black Aesthetic movement of the 1960s and 1970s, and the new "hodge podge" aestheticism of the 1990s. Still, whatever the decade, African American poets have continued to define their identity as either Americans or displaced Africans, using their considerable talent to explain the vexations of being both black and despised. The poetry—like all art that is truly contemporary—often seems too slippery, too present, and too difficult for the tentative critic. And yet poems like "The Middle Passage" in the 1950s, "In the Mecca" in the 1970s, and "A Dark and Splendid Mass" in the 1990s are essential evocations, ones that astonish us with their craft, their irrefutable wisdom, and their depth of feeling. Students will be expected to give a class presentation and to write a substantial term paper.

**ENGL 480-481 Seminar in Writing**

Fall, 480; spring 481. 4 credits.  
See complete description in section headed Creative Writing.

**[ENGL 482 Forms of Poetry]**  
4 credits. To be offered 1999-2000.]

**ENGL 490 Chicana Renaissance (also Latino Studies 490 and Women's Studies 489)**

Spring. 4 credits. B. V. Olguin.  
This course examines the work of Chicana writers and visual artists from the early 1980s to the present. Students will examine the



various revisions of the masculinist cultural nationalist paradigms proposed by their male counterparts in the 1960s and 1970s, and more importantly, the unique and varied embodied poetics that distinguish the Chicana Renaissance. In response to the famous query "Can the subaltern speak?" we will consider how Chicanas are reconstructing their subaltern spaces through a polyphony of styles and discourses. We will examine, for example, how Chicana artists, writers (and even critics) appropriate and revise various popular myths such as the Three Marias; popular cultural forms such as chisme; and even more standard forms of discourse such as the bildungsroman. Throughout this survey, we will be attentive to explicating elements of the "Chicana aesthetic" that have revitalized Chicana/o and U.S. Latina/o literatures in general. In examining how various Chicana authors politicize the body, the domestic sphere, and the nation, we will also consider the inevitable impact these discourses have had on feminist discourses throughout the U.S. and Latin America. Authors include Alma Villanueva, Bernice Zamora, Cherríe Moraga, Gloria Anzaldúa, Sandra Cisneros, Evangelina Vigil-Piñon, Roberta Fernandez, Helena Maria Viramontes, Rosemary Catacalos, Amalia Mesa-Baines, Judith Baca, Ester Hernandez, and others.

#### ENGL 491 Honors Seminar I

Fall. 4 credits. Open to students in the Honors Program in English or related, or by permission of instructor.

#### Women's Writing: Revolution and Romance. M. Jacobus.

The period of the French Revolution and its aftermath was an especially rich one for women writers, stimulating them to participate in its politics, its arguments about women's sexualities and rights, its anxieties and terrors. Women became travellers in unprecedented numbers, reading and writing more novels than ever before. This course looks at first- and second-generation women novelists (and some poets) of the period, focusing on the tensions between political and romantic concerns. We will read feminist writings, including Mary Wollstonecraft's autobiographical fiction and travel book, Elizabeth Inchbald's novel of female education and conflict, *A Simple Story*, and Mary Hays' confessional novel, *The Memoirs of Emma Courtney*. We will look at two novels spawned by the Revolution, Charlotte Smith's *Desmond* and a critique of 1790s feminism, Amelia Opie's *Adeline Mowbray*. Alongside this radical tradition and its assessment, we will read gothic novels by Anne Radcliffe (*The Romance of the Forest*) and Jane Austen (*Mansfield Park*) which respond to the romance of the past and the threat of change. Maria Edgeworth's Irish fiction, *Castle Rackrent* and *Ennui*, focuses on changes in England's relation to its colonial neighbour, while Claire de Duras' *Ourika*, a novel of French post-Revolutionary race-relations, suggests how melancholia and race become intertwined. We will also read later novels such as Mary Shelley's *Frankenstein*, *Mathilda*, and *The Last Man*, which engage with the Romantic fascination with science, monstrosity, incest, solitude, politics, and plague from the perspective of a second-generation Romantic woman writer.

#### ENGL 492 Honors Seminar II

Spring. 4 credits. Open to students in the Honors Program in English or related fields, or by permission of instructor.

#### Section I: Modern American Poetry (also American Studies 492). R. Gilbert.

A close consideration of six significant poets of the last fifty years: Elizabeth Bishop, Robert Lowell, John Ashbery, A. R. Ammons, Adrienne Rich, Rita Dove. We will examine individual poems as well as published collections, trace the shape of each poet's career, and map the shifting relations between self, world, history and language reflected in their poems. Intensive reading in poetry, with some prose as well. In addition, supplementary reading in other contemporary poets may be assigned to help provide a literary context. Several short papers and a longer project; one or two in-class presentations.

#### Section II: Twentieth Century Women Writers of Color (also Asian American Studies 492). S. Wong.

This course will explore a range of writing—novels, stories, poems, essays—by American women writers of color in the twentieth century. We will look at how these writings articulate concerns with language, home, mobility, and memory, and at how the work is informed by the specificities of gender, race, region and class. Readings may include works by Joy Harjo, Leslie Marmon Silko, Sandra Cisneros, Gloria Anzaldúa, Theresa Hak Kyung Cha, Sigrid Nunez, Jamaica Kincaid, Maxine Hong Kingston, and Gwendolyn Brooks.

Course requirements will include class presentations, short responses to the readings, and a longer research essay.

#### ENGL 493 Honors Essay Tutorial I

Fall or spring. 4 credits. Prerequisites: senior standing and permission of Director of the Honors Program.

#### ENGL 494 Honors Essay Tutorial II

Fall or spring. 4 credits. Prerequisites: English 493 and permission of Director of the Honors Program.

#### ENGL 495 Independent Study

Fall or spring. 2–4 credits. Prerequisites: Permission of departmental adviser and director of undergraduate studies.

### Courses Primarily for Graduate Students

Permission of the instructor is a prerequisite for admission to courses numbered in the 600s. These are intended primarily for graduate students, although qualified undergraduates are sometimes admitted. Undergraduates seeking admission to a 600-level course should consult the instructor. The list of courses given below is illustrative only; a definitive list, together with course descriptions and class meeting times, is published in a separate department brochure before course enrollment each term.

#### Graduate English Courses for 1998–99

##### Fall

#### ENGL 600 Colloquium for Entering Students

#### ENGL 602 Literature and Theory (also English 302, Comparative Literature 302, and Comparative Literature 622)

#### ENGL 611 Old English (also English 311)

#### ENGL 619 Chaucer

#### ENGL 628 Elizabethan and Jacobean Drama (also English 425)

#### ENGL 632 Studies in the 18th Century: Colonialism and 18th-century Literature

#### ENGL 639 Studies in Romanticism: Writers of the 1790s

#### ENGL 646 Studies in Victorian Literature: Narrative Technique and Gendered Identities

#### ENGL 653 On Art and Eros: Ruskin, Pater, Wilde

#### ENGL 664 American Poetry, 1910–1930

#### ENGL 668 Bloomsbury and the Beginnings of British Modernism

#### ENGL 673 The American 1890s

#### ENGL 676 Testimonio (Testimonial Narrative) in the Americas

#### ENGL 695 Race, Colonialism, and Contemporary Theory

#### ENGL 780.1 MFA Seminar: Poetry

#### ENGL 780.2 MFA Seminar: Fiction

##### Spring

#### ENGL 612 Beowulf (also English 312)

#### ENGL 616 The Development of Print Culture

#### ENGL 617 Early Medieval Archaeology and Literature (also English 417 and Archaeology 617)

#### ENGL 627 Studies in Shakespeare: Shakespeare and the Theatre

#### ENGL 629 Milton

#### ENGL 642 Delusions and Dreams: Literary Psychoanalysis

#### ENGL 644 Studies in Victorian Poetry

#### ENGL 688 Joyce's *Ulysses* and the Modern Tradition

#### ENGL 691 The Stein Era: (Post)Modernism and the Canonizing of Gertrude Stein

#### ENGL 699 Studies in African-American Literature

#### ENGL 765 Dickinson

#### ENGL 781.01 MFA Seminar: Poetry

#### ENGL 781.02 MFA Seminar: Fiction

### FILM

See under Department of Theatre, Film and Dance.

## FRENCH LANGUAGE AND LINGUISTICS

See under Languages and Linguistics.

## FRENCH LITERATURE

See under Department of Romance Studies.

## FRESHMAN WRITING SEMINARS

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, see "Special Programs and Interdisciplinary Studies" at the end of the Arts and Sciences section of this catalog and consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in November for the spring term.

## GEOLOGICAL SCIENCES

B. L. Isacks, chair; R. W. Kay, director of undergraduate studies; R. W. Allmendinger, W. Allmon, M. Barazangi, W. A. Bassett, J. M. Bird, L. D. Brown, L. M. Cathles, J. L. Cisne, K. Cook, L. A. Derry, C. H. Greene, T. E. Jordan, S. Mahlburg Kay, F. H. T. Rhodes, W. B. Travers, D. L. Turcotte, W. M. White

As an intercollege unit, the Department of Geological Sciences has degree programs in both the College of Arts and Sciences (B.A. degree) and the College of Engineering (B.S. degree).

We live on a planet with finite resources and a finite capacity to recover quickly from human-induced environmental stresses. It is also a powerful planet, with geologic hazards such as earthquakes and volcanic eruptions that alter the course of history with little prior warning. As the human population grows, understanding the earth and its resources becomes progressively more important for both future policy makers and ordinary citizens. Because the human need to understand the earth is so pervasive, we provide our students with a broad and solid minimal set of required courses plus room to explore more specialized topics with well-chosen electives within and outside the department. The Geological Sciences Major prepares students for advanced study in geology, geophysics, geochemistry and geobiology, and careers in mineral and petroleum exploration or in environmental geology. Alternatively, it is a valuable major for a pre-law or pre-med program or in preparation for a career in K-12 education.

In addition to course work, students learn by outdoor field work and involvement in the vigorous research programs of the department. Facilities include equipment for processing seismic signals and digital images of the earth's surface, instruments for highly precise isotopic and element analyses, and extensive libraries of earthquake records, satellite images, and exploration seismic records. High-pressure, high-temperature mineral physics research uses the diamond anvil cell and the Cornell High Energy Synchrotron Source (CHESS). Undergraduates have served as field assistants for faculty

members and graduate students in Argentina, British Columbia, the Aleutian Islands, Scotland, Switzerland, Tibet, and Barbados. Undergraduates are encouraged to participate in research activities, frequently as paid assistants.

The Department of Geological Sciences is the core department in a new intercollege program in the Science of Earth Systems (SES). In the College of Arts and Sciences, this program can be taken as a separate major administered by the Department of Geological Sciences (described in more detail in the section at the front of this catalog, "Interdisciplinary Centers, Programs, and Studies"). The Geological Sciences major emphasizes the structure, composition and evolution of our planet, while the SES major is more concerned with currently active processes on and near the earth's surface where the interactions of water, life, rock and air produce our planetary environment. The SES major is for students interested in careers in atmospheric, hydrological and ocean sciences, environmental chemistry (biogeochemistry), and environmental geophysics.

### The Major

The prerequisites for admission to a major in geological sciences in the College of Arts and Sciences are two two-semester sequences in mathematics and physics, MATH 111-112 or MATH 191-192 and PHYS 207-208 or PHYS 112-213, or their equivalents, and a semester course in chemistry, such as CHEM 207 or 211. GEOL 101 or GEOL 201 followed by GEOL 102 or GEOL 104 are strongly recommended, but a student with a strong foundation in mathematics and science may be accepted as a major without completion of an introductory sequence.

Majors take GEOL 210 and GEOL 214, the five 300-level core courses listed below, 6 credits of additional course work from geological sciences courses numbered 300, 400, or 600, plus an additional course in either computer science or biological science, or an intermediate-level course in biological science, mathematics, chemistry, or physics.

In addition, a requirement for an advanced outdoor field experience may be met by completing one of the following 4 credit options: (a) GEOL 491-492 (Undergraduate Research, 2 credits each) with a significant component of field work; (b) GEOL 491 or 492 based on field observations obtained in GEOL 212 (Caribbean Field Trip, 2 credits) or GEOL 417 (Field Mapping in Argentina, 3 credits) for a combined 4-credit minimum; (c) GEOL 437 (Geophysical Field Methods, 3 credits) plus at least 1 credit of GEOL 491 or 492 using geophysical techniques from GEOL 434; or (d) An approved outdoor field course taught by another college or university (4 credit minimum).

### Core Courses

**GEOL 326 Structural Geology**

**GEOL 355 Mineralogy**

**GEOL 356 Petrology and Geochemistry**

**GEOL 375 Sedimentology and Stratigraphy**

**GEOL 388 Geophysics and Geotectonics**

Prospective majors should consult R. W. Kay, director of undergraduate studies, or another faculty member as early as possible for advice in planning a program. Students majoring in geological sciences may attend the departmental seminars and take advantage of cruises, field trips, and conferences offered through the Department of Geological Sciences.

Courses offered at the 100 and 200 level are open to all students. Certain 300- and 400-level courses in geology also may be of particular interest to students of chemistry, biology, ecology, and physics. Students are encouraged to inquire about courses that interest them at the department office in Snee Hall.

**Honors.** An honors program is offered by the Department of Geological Sciences for superior students. Candidates for honors must maintain an overall 3.0 grade-point average, a cumulative average of 3.5 in the major, and complete an honors thesis (Geological Sciences 491 or 492). Students interested in applying should contact the director of undergraduate studies during the second semester of the junior year.

## COURSES

### Freshman and Sophomore Courses

#### GEOL 101 Introductory Geological Sciences

Fall, spring, or summer. 3 credits. Fall: W. B. Travers; spring: J. M. Bird; summer: W. Brice.

Designed to enhance an appreciation of the physical world. Natural environments, surface features, dynamic processes such as mountain belts, volcanoes, earthquakes, glaciers, and river systems are emphasized. Interactions of the atmosphere, hydrosphere, biosphere, and lithosphere (Earth System Science). Water, mineral, and fuel resources; environmental concerns. Field trips in the Ithaca region.

#### GEOL 102 Evolution of the Earth and Life (also BIO G 170)

Spring, summer. 3 credits. Spring: J. L. Cisne.

Earth systems and their evolution. Earth history's astronomical context. Plate tectonics, continental drift, and their implications for climate and life. Coevolution of life and the atmosphere. Precedents for ongoing global change. Dinosaurs, mass extinctions, and human ancestry. Laboratories on reconstructing geological history and mapping ancient geography. Fossil collecting on field trips.

#### GEOL 104 The Sea: An Introduction to Oceanography (also BIO ES 154)

Spring, summer. 3-4 (4 credits with lab section) credits. Spring: C. H. Greene, W. M. White; summer: L. Godfrey.

A survey of the physics, chemistry, geology, and biology of the oceans for both science and non-science majors. Topics include: sea-floor spreading and plate tectonics, marine sedimentation, chemistry of seawater, ocean currents and circulation, the oceans and climate change, ocean ecology, coastal processes, marine pollution, and marine resources.

**GEOL 105 Writing on Rocks (Freshman Seminar)**

Fall. 3 credits. J. Chiment.  
See Freshman Seminar Handbook for description.

**GEOL 106 Vertebrate Fossil Preparation**

Spring. 1 credit. Prerequisites: one introductory geology course or concurrent enrollment, class size is limited.  
J. Chiment.

A laboratory-oriented course that will expose students to techniques of vertebrate fossil preparation. Roughing-out and fine preparation of large specimens in solid matrix will be covered, as well as screen washing and microscope techniques for the recovery of micro-vertebrate remains. Specialized scanning techniques will be discussed.

The class will meet for one hour each week for the first six weeks of the semester. Students will be assigned to an individual or group project requiring two hours of participation each week for the remainder of the semester.

**GEOL 107 How the Earth Works**

Fall. 1 credit. J. L. Cisne.  
A user-friendly introduction to the workings and interactions of solid earth, ocean, atmosphere, and life as they relate to understanding ongoing global change.

**GEOL 108 Geology and Society**

Spring. 1 credit. May be taken concurrently with or after GEOL 101, 102, 104, 111, or 201. T. E. Jordan.  
Intended for students who are curious about the impact of geological materials and processes on society, what geologists actually do, what the big questions are in current research, and what a geology career might hold in store. A different speaker each week takes a look at topics ranging from environmental law to natural resources to agriculture.

**GEOL 109 Dinosaurs**

Fall. 1 credit. J. L. Cisne.  
An introductory survey course for anyone interested in dinosaurs. Lectures examine the fossil evidence and illustrate how various geological and biological disciplines contribute to understanding dinosaurs and their world.

**GEOL 111 To Know the Earth and Build a Habitable Planet**

Fall. 3 credits. J. M. Bird.  
Acquaints the non-scientists with Earth. Major features and how Earth has evolved. Earth System Science and building a habitable planet. Effects of human activity on geologic environments, mitigating environment damage, living with natural hazards. Mineral resource use in 21st century and an environmentally sound fuel-minerals cycle.

**GEOL 122 Earthquake! (also ENGRI 122)**

Fall. 3 credits. L. D. Brown.  
The science of natural hazards and strategic resources is explored. Techniques for locating and characterizing earthquakes, and assessing the damage they cause; methods of using sound waves to image the earth's interior to search for strategic materials; the historical importance of such resources. Seismic experiments on campus to probe for groundwater, the new critical environmental resource.

**GEOL 123-124 Science of Earth Systems Colloquium (also ABEN 120-121, SCAS 101-102 and SES 101-102)**

For description, see the Science of Earth Systems section in "Interdisciplinary Centers, Programs, and Studies," in the front part of the catalog.

**GEOL 125 Global Environment (also ENGRI 125)**

Fall. 3 credits. W. M. White, L. A. Derry.  
Wise environmental management requires an understanding of natural chemical interactions. Examines natural chemical cycles among atmosphere, biosphere, hydrosphere, and the solid Earth; the impact of man's activity on them, including the greenhouse effect, ozone hole, acid rain, and water pollution. Laboratory sessions include environmental chemical analysis and computer simulation.

**GEOL 200 Art, Archaeology, and Analysis (also ARKEO 285, ART 372, ARTH 200, ENGL 285, ENGRI 185, PHYS 200)**

Spring. 3 credits. R. Kay.  
An interdepartmental course on the use of techniques of science and engineering in cultural research. Applications of physical and physiological principles to the study of archaeological artifacts and works of art. Historical and technical aspects of artistic creation. Analyses by modern methods to deduce geographical origins, and for exploration, dating and authentication of cultural objects. Does not meet liberal studies distribution requirement for Engineering.

**GEOL 201 Introduction to the Physics and Chemistry of the Earth (also ENGRD 201)**

Spring. 3 credits. Prerequisites: Mathematics 191 and Physics 112.  
L. M. Cathles.  
Formation of the solar system: accretion and evolution of the earth. The rock cycle: radioactive isotopes and the geological time scale, plate tectonics, rock and minerals, earth dynamics, mantle plumes. The hydrologic cycle: runoff, floods and sedimentation, groundwater flow, contaminant transport. Weathering cycle: chemical cycles, CO<sub>2</sub> (weathering), rock cycle, controls on global temperature (CO<sub>2</sub> or ocean currents), oil and mineral resources.

**GEOL 203 Natural Hazards and the Science of Complexity**

Fall. 3 credits. Prerequisites: 1 calculus course. D. L. Turcotte.  
Studies of natural hazards; earthquakes, volcanic eruptions, floods, hurricanes, tornadoes, severe storms, wildfires, meteor impacts. Applications of the science of complexity to natural hazards: fractals, chaos, and self-organized criticality.

**GEOL 210 Introduction to Field Methods in Geological Sciences**

Fall. 3 credits. Prerequisite: GEOL 101, 201, or permission of instructor. Weekly field sessions. A weekend field trip.  
S. Mahlburg Kay.  
The methods by which rocks are used as a geological database. Field methods used in the construction of geologic maps and cross sections; systematic description of stratigraphic sections. Field and laboratory sessions on Saturday mornings until Thanksgiving. One additional lecture during most of these weeks. One weekend field trip to eastern New York.

**GEOL 212 Caribbean Field Trip (January)**

Fall. 2 credits. Prerequisite: permission of instructor. Enrollment limited to 15.  
Approximate cost \$1100. L. D. Brown.  
A multidisciplinary look at earth science and environmental issues represented in the Yucatan Peninsula of Mexico. Base for operations will be the Centro Ecologico Akumal, located on the Caribbean coast south of Cancun. This coast and its associated reef epitomizes the conflict between ecological preservation and economic development on an international scale. Excursions may include visits to Merida, a historic Spanish town which lies above the buried impact structure that many believe resulted in the death of the dinosaurs; ruins at Chichen Itza, Mayapan, Coba, and Tulum associated with the rise and fall of Mayan culture; and wildlife (monkeys, jaguars, crocodiles) preserves where recent geological studies have found evidence that the fall of the Mayans may have been triggered by climate change. The field trip will feature snorkel tours of reefs and lagoons as well as the cenotes (sinkholes) that characterize this classic karst landscape. Weekly lectures during the semester will provide background; field trip tentatively scheduled for January 1999.

**GEOL 213 Marine and Coastal Geology**

Summer. 2 credits. Prerequisites: an introductory course in geology or permission of instructor. Staff.  
A special one-week course offered at Cornell's Shoals Marine Laboratory (SML), on an island near Portsmouth, New Hampshire. For more details and an application, consult the SML office, G14 Stimson Hall. Estimated cost for 1998 (including tuition, room, board, and ferry transportation) is \$895.

**GEOL 214 Western Adirondack Field Course**

Spring, one week at the end of the semester. 1 credit. Prerequisite: GEOL 210 or equivalent, or permission of instructor. Students should be prepared for overnight camping and share in the cost of camp meals. Independent project.  
W. A. Bassett.  
Field mapping methods, mineral and rock identification, examination of Precambrian metamorphic rocks and lower Paleozoic sediments, talc and zinc mines.

**Junior, Senior, and Graduate Courses**

Of the following, the core courses GEOL 326, 355, 356, 375, and 388 may be taken by B.S. candidates who have successfully completed GEOL 201 or the equivalent and by B.A. candidates who have completed GEOL 101 or the equivalent, or who can demonstrate to the instructor that they have adequate preparation in mathematics, physics, chemistry, biology, or engineering.

**GEOL 302 Evolution of the Earth System (also SES 332 and SCAS 302)**

For description, see the Science of Earth Systems section in "Interdisciplinary Centers, Programs, and Studies," in the front part of the catalog.

**GEOL 321 Introduction to Biogeochemistry (also SES 321, NTRES 321)**

Fall. 4 credits. Prerequisites: college level chemistry, plus a course in biology and/or geology. L. A. Derry, J. Yavitt.

Control and function of the Earth's global biogeochemical cycles. The course begins with a review of the basic inorganic and organic chemistry of biologically significant elements, and then considers the biogeochemical cycling of carbon, nutrients, and metals that take place in soil, sediments, rivers and the oceans. Topics include weathering, acid-base chemistry, biological redox processes, nutrient cycling, trace gas fluxes, bio-active metals, the use of isotopic tracers, and mathematical models. Interactions between global biogeochemical cycles and other components of the Earth system are discussed.

#### **GEOL 326 Structural Geology**

Spring. 4 credits. Prerequisite: GEOL 101 or 201, or permission of instructor.

R. W. Allmendinger.

Nature and origin of deformed rocks at microscopic to macroscopic scales, with emphasis on structural geometry and kinematics. Topics include stress, strain, rheology, deformation mechanisms, minor structures, faulting, folding, and structural families.

#### **GEOL 355 Mineralogy**

Fall. 4 credits. Prerequisite: GEOL 101 or 201 and Chem 207 or permission of instructor. S. Mahlburg Kay (Fall only).

Examination of minerals by hand-specimen properties and optical microscopy. Geological setting, classification, crystal structures, phase relations, chemical properties, and physical properties of minerals. X-ray diffraction is introduced. Independent research project.

#### **GEOL 356 Petrology and Geochemistry**

Spring. 4 credits. Prerequisite: GEOL 355. R. W. Kay.

Principles of phase equilibrium as applied to igneous and metamorphic systems. Description, classification, chemistry, origin, regional distribution, and dating of igneous and metamorphic rocks. Geochemical distribution of trace elements and isotopes in igneous and metamorphic systems. The petrological evolution of the planets.

#### **GEOL 375 Sedimentology and Stratigraphy**

Fall. 4 credits. Prerequisite: GEOL 101 or 201. J. L. Cisne.

Formation of sedimentary rocks. Depositional processes and environments. Correlation of strata in relation to time and environment. Petrology of sandstones and limestones. Geological age determination. Reconstruction of paleogeography and interpretation of earth history from stratigraphic evidence. Organization of strata in stratigraphic sequences.

#### **GEOL 388 Geophysics and Geotectonics**

Spring. 4 credits. Prerequisites: Mathematics 192 and Physics 208, 213, or equivalent. B. L. Isacks.

Global tectonics and the deep structure of the solid earth as revealed by investigations of earthquakes, earthquake waves, the earth's gravitational and magnetic fields, and heat flow.

#### **GEOL 411 Satellite Remote Sensing in Geosciences**

Fall. 3 credits. Prerequisite: permission of instructor. B. L. Isacks.

Instruction in satellite remote sensing, image processing, geographic information systems (GIS) and analysis of digital elevation models, using advanced computer workstations, via

participation in current research on earthquakes, glaciers, and tectonics.

#### **GEOL 417 Field Mapping in Argentina**

Summer. 3 credits. Prerequisites: GEOL 210 and 326; Spanish desirable, but not required. S. Mahlburg Kay.

Modern techniques of geological mapping applied in the region of San Juan, Argentina, including folded and faulted sedimentary rock units of the Andean Precordillera (San Juan River section), intensely deformed Precambrian metamorphic rocks of the Pampean Ranges (Pie de Palo), and shallow-level silicic intrusives (Cerro Blanco-Ullun).

#### **GEOL 423 Petroleum Geology**

Fall. 3 credits. Recommended: GEOL 326. Offered alternate years. W. B. Travers.

Introduction to hydrocarbon exploration and development. Exploration techniques, including well logs, fluid pressures, seismic-reflection methods, gravity, and magnetic measurements to map subsurface structures and stratigraphy. Petroleum origin and migration. Dispersal systems and depositional patterns of petroleum reservoirs. Economics of exploration, leasing, drilling and production. Estimates of petroleum reserves, including tar sands and oil shales.

#### **GEOL 434 Reflection Seismology**

Spring. 4 credits. Prerequisites: Mathematics 192 and Physics 208, 213, or equivalent. L. D. Brown.

Fundamentals of subsurface imaging by multichannel seismic reflection techniques as used in oil exploration and geohydrological investigations. Covers survey design, acquisition, analysis, processing and interpretation in both 2D and 3D. Includes discussion of related techniques such as seismic refraction analysis, tomographic inversion, vertical seismic profiling, shear wave exploration and ground penetrating radar. Lab is keyed to state-of-the-art seismic processing, modeling and interpretation software from LandMark.

#### **GEOL 437 Geophysical Field Methods**

Fall. 3 credits. Prerequisites: PHYS 213 and MATH 192 or equivalents, or permission of instructor. L. D. Brown.

Introduction to field methods of geophysical exploration, especially as applied to environmental issues. Emphasis on seismic, ground penetrating radar, gravity, and magnetic techniques. Field surveys carried out at the beginning of the semester are analyzed in a series of weekly follow-up meetings during the semester wherein the results are analyzed and interpreted. A field companion to GEOL 436, which is recommended but not required prior to this course.

#### **GEOL 445 Geohydrology (also ABEN 471 and C&EE 431)**

Fall. 3 credits. Prerequisites: Mathematics 294 and Engr 202. W. Brutsaert, L. M. Cathles, J.-Y. Parlange, T. S. Steenhuis.

Intermediate-level study of aquifer geology, groundwater flow, and related design factors. Includes description and properties of natural aquifers, groundwater hydraulics, soil water, and solute transport.

#### **GEOL 452 X-ray Diffraction Techniques**

Spring. 3 credits. Prerequisites: GEOL 355 or permission of instructor. Offered alternate years. W. A. Bassett and staff.

Automated X-ray diffractometer, Debye-Scherrer, real-time Laue, high-temperature diffraction, high-pressure diffraction, and pole-figure analysis. Applications in materials science and geological sciences. Labs will be held in the new Materials Science X-Ray Facility.

#### **GEOL 453 Advanced Petrology**

Fall. 3 credits. Prerequisite: GEOL 356.

Offered alternate years. R. W. Kay.

Magmas and metamorphism in the context of plate tectonics. Major and trace element chemistry and phase petrology as monitors of the creation and modification of igneous rocks. Temperature and stress in the crust and mantle and their influence on reaction rates and textures of metamorphic rocks. Application of experimental studies to natural systems.

#### **GEOL 454 Advanced Mineralogy**

Spring. 3 credits. Prerequisite: GEOL 355 or permission of instructor. Offered alternate years. W. A. Bassett.

Crystallography and crystal chemistry of minerals and the methods of their study. X-ray diffraction, optical methods, computer simulation of crystal structures. Emphasis on effects of high pressures and temperatures with implications for understanding of Earth's interior.

#### **[GEOL 455 Geochemistry**

Fall. 4 credits. Prerequisites: Chemistry 207 and Mathematics 192 or equivalent.

Recommended: GEOL 356. Offered alternate years. Not offered 1998-99. W. M. White.

The Earth from a chemical perspective. Formation of the elements; cosmochemistry; chemical evidence regarding the formation of the Earth and Solar System; trace-element geochemistry; isotope geochemistry; geochemical thermodynamics and kinetics; chemical evolution of the crust, mantle, and core; weathering and the chemistry of natural waters; chemistry of rivers and the oceans; hydrothermal systems and ore deposition.]

#### **GEOL 458 Volcanology**

Spring. 3 credits. Corequisite: GEOL 356 or equivalent. Offered alternate years.

R. W. Kay and W. M. White.

Causes of volcanism, melting in the Earth, and the origin of magmas. Physical volcanology, nature and types of volcanic eruptions and associated deposits, eruption mechanisms. Volcanic plumbing systems, magma chamber processes, evolution of magma. Volcanism and impact phenomena in the Solar System. Volcanic hazard assessment and volcano monitoring. Ore deposits associated with volcanism.

#### **GEOL 462 Marine Ecological Processes (also BIOES 462)**

Spring. 3 credits. Limited to 75 students.

Prerequisite: BIOES 261. Offered alternate years. Lects and disc, M W F 10:10.

C. D. Harvell, C. H. Greene.

Lectures and discussion focus on current research in broad areas of marine ecology with an emphasis on processes unique to marine systems. A synthetic treatment of multiple levels or organization in marine systems including organismal, population, community, ecosystems, and evolutionary biology. Examples are drawn from all types of marine habitats, including polar seas, temperate coastal waters, and tropical coral reefs.



**GEOL 475 Special Topics in Oceanography**

Spring, summer. 2–5 var. credits.

Prerequisites: GEOL 104 or BIO ES 154, and permission of instructor.  
C. H. Greene.

Undergraduate instruction and participation in advanced areas of oceanographic research. Topics will change from term to term. Contact instructor for further information.

**GEOL 476 Sedimentary Basins: Tectonics and Mechanics**

Fall. 3 credits. Prerequisite: GEOL 375 or permission of instructor. T. E. Jordan.

Subsidence of sedimentary basins from the point of view of plate tectonics and geomechanics. Interactions of subsidence, sediment supply, and environmental characteristics in development of stratigraphic sequences. Stratigraphic characteristics of active-margin, passive-margin, and cratonic basins. Geophysical and stratigraphic modeling; sequence stratigraphy. Modern and ancient examples.

**[GEOL 478 Advanced Stratigraphy]**

Fall. 3 credits. Prerequisite: GEOL 375 or permission of instructor. Offered alternate years. Not offered 1998–99. T. E. Jordan.

Modern improvements on traditional methods of study of ages and of genetic relations among sedimentary rocks, emphasizing 3-D relationships. Techniques and applications of sequence stratigraphy at scales ranging from beds to entire basins. Physical correlation, dating techniques, and time resolution in sedimentary rocks. Physical controls on the stratigraphic record. Numerical modeling.]

**GEOL 479 Paleobiology (also BIOES 479)**

Fall. 3 credits. Prerequisites: one year of introductory biology for majors and either BIOES 274, 373, GEOL 375, or permission of instructor. Offered alternate years.  
W. Allmon.

A survey of the major groups of organisms and their evolutionary histories. Intended to fill out the biological backgrounds of geology students and the geological backgrounds of biology students concerning the nature and significance of the fossil record for their respective studies.

**GEOL 481 Senior Survey of Earth Systems**

Fall. 3 credits. Limited to seniors majoring in geological sciences.  
J. M. Bird.

Survey course that integrates undergraduate course work, intended to enhance overall understanding of geological sciences. Emphasis on current models of earth's dynamic systems (e.g., global climate change; mantle evolution). Guest lecturers; synthesis and review literature; scientific literature readings; discussions; student presentations.

**GEOL 491–492 Undergraduate Research**

Fall, spring. 1 to 4 credits. Staff.

(B. L. Isacks and R. W. Kay, coordinators).

Introduction to the techniques and philosophy of research in the earth sciences and an opportunity for undergraduates to participate in current staff research projects. Topics chosen in consultation with, and guided by, a staff member. A short written report is required, and outstanding projects are prepared for publication.

**GEOL 500 Design Project in Geohydrology**

Fall, spring. 3–12 credits. An alternative to an industrial project for M.Eng. students choosing the geohydrology option. May continue over two or more semesters.

L. M. Cathles.

The project may address one of many aspects of groundwater flow and contamination, and must involve a significant geological component and lead to concrete recommendations or conclusions of an engineering nature. Results are presented orally and in a professional report.

**GEOL 502 Case Histories in Groundwater Analysis**

Spring. 4 credits. L. M. Cathles.

Groundwater flow in a specific area, such as a proposed nuclear-waste disposal site, analyzed in depth. Geological and resource data on the area are presented early in the course. Then the material is analyzed by students working as an engineering analysis team. Each student makes a weekly progress report and writes part of a final report. Results are presented in a half-day seminar at end of term.

**[GEOL 622 Advanced Structural Geology I]**

Spring. 3 credits. Prerequisites: GEOL 326 and permission of instructor. Offered alternate years. Not offered 1998–99.  
R. W. Allmendinger.

Stress-strain theory and application. Advanced techniques of structural analysis. Topics include finite and incremental strain measurement; microstructure, preferred orientation, and TEM analysis; pressure solution and cleavage development; and experimental deformation. Applications to deformation of unconsolidated sediments, brittle and brittle-ductile deformation of supracrustal strata, and ductile deformation of high-grade metamorphic rocks. Kinematic analysis of shear zones and folds in these regimes.]

**GEOL 624 Advanced Structural Geology II**

Spring. 3 credits. Prerequisites: GEOL 326 and permission of instructor. Offered alternate years. R. W. Allmendinger.

Geometry, kinematics, and mechanics of structural provinces. Concentration on thrust belts, rift provinces, or strike-slip provinces. Techniques of balanced cross sections.

**GEOL 628 Geology of Orogenic Belts**

Spring. 3 credits. Prerequisite: permission of instructor. J. M. Bird.

A seminar course in which students study specific geologic topics of an orogenic belt selected for study during the term. The course is intended to complement GEOL 681.

**[GEOL 634 Advanced Geophysics I: Fractals and Chaos in Geology and Geophysics]**

Spring. 3 credits. Prerequisite: GEOL 388 or permission of instructor. Offered alternate years. Not offered 1998–99.  
D. L. Turcotte.

Definitions of fractal sets and statistical fractals, scale invariance, self-affine fractals, multifractals, applications to fragmentation, seismicity and tectonics, petroleum distribution and reserves, ore grade and tonnage, drainage networks and landforms, and floods and droughts. Definitions of chaos and self-organized criticality, renormalization groups, diffusion limited aggregation and percolation

clusters, wavelet transforms, applications to mantle convection, the earth's dynamo, and distributed seismicity.]

**GEOL 636 Advanced Geophysics II: Quantitative Geodynamics**

Spring. 3 credits. Prerequisite: GEOL 388 or permission of instructor. Offered alternate years. D. L. Turcotte.

Stress and strain in the earth, elasticity and flexure, heat transfer, gravity, fluid mechanics, rock rheology, faulting, chemical geodynamics, flow in porous media.

**[GEOL 651 Analysis of Biogeochemical Systems]**

Spring. 3 credits. Prerequisite: MATH 293 or permission of instructor. Offered alternate years. Not offered 1998–99.  
L. A. Derry.

Dynamics of biogeochemical systems. Kinetic treatment of biogeochemical cycles. Box models, residence time, response time. Analytical and numerical solutions of model systems. Eigen-analysis of linear systems. Feedback and nonlinear cases, problems of uncertainties in natural systems. Modeling software such as Stella II and Matlab; applications to current research of participants or from recent literature.]

**[GEOL 656 Isotope Geochemistry]**

Spring. 3 credits. Open to undergraduates. Prerequisite: GEOL 455 or permission of instructor. Offered alternate years. Not offered 1998–99. W. M. White.

Nucleosynthetic processes and the isotopic abundances of the elements. Geochronology and cosmochronology using radioactive decay schemes, including U-Pb, Rb-Sr, Sm-Nd, K-Ar, U-series isotopes, and cosmogenic isotopes such as  $^{14}\text{C}$  and  $^{36}\text{Cl}$ . Use of radiogenic and stable isotopes in petrology and their application to study of the evolution of the crust and mantle. Isotopic evidence regarding the formation of the Earth and the Solar System. Stable isotopes and their use in geothermometry, ore petrogenesis, paleontology, and the global climate system.]

**GEOL 681 Geotectonics**

Fall. 3 credits. Prerequisite: permission of instructor. J. M. Bird.

Theories of orogeny; ocean and continent evolution. Kinematics of lithosphere plates. Rock-time assemblages of modern oceans and continental margins, and analogs in ancient orogenic belts. Time-space reconstructions of specific regions. Problems of dynamic mechanisms—corollaries and evidence from crustal features.

**GEOL 695 Computer Methods in Geological Sciences**

Fall, spring. 3 credits. L. Brown, B. L. Isacks.

Independent research projects using state-of-the-art computational resources in the Department of Geological Sciences. Possibilities include: image and seismic processing, seismic and geomechanical modeling, GIS, use of interpretational workstations for 3D seismic and satellite imagery; modeling fluid flow through complex media.

**GEOL 700–799 Seminars and Special Work**

Fall, spring. 1–3 credits. Prerequisite: permission of instructor. Staff.

Advanced work on original investigations in geological sciences. Topics change from term to term. Contact appropriate professor for more information.

**GEOL 722 Advanced Topics in Structural Geology**

R. W. Allmendinger.

**GEOL 731 Plate Tectonics and Geology**

J. M. Bird.

**GEOL 733 Fractals and Chaos—Independent Studies**

D. L. Turcotte.

**GEOL 751 Petrology and Geochemistry**

S. Mahlburg Kay, R. W. Kay.

**GEOL 753 Advanced Topics in Mineral Physics**

W. A. Bassett.

**GEOL 755 Advanced Topics in Petrology and Tectonics**

J. M. Bird, W. A. Bassett.

**GEOL 757 Current Research in Petrology**

S. Mahlburg Kay, R. W. Kay.

**GEOL 762 Advanced Topics in Petroleum Exploration**

Fall. W. B. Travers.

**GEOL 771 Advanced Topics in Sedimentology and Stratigraphy**

T. E. Jordan.

**GEOL 773 Paleobiology**

J. L. Cisne.

**GEOL 775 Advanced Topics in Oceanography**

Spring. C. H. Green.

**GEOL 780 Earthquake Record Reading**

Fall. M. Barazangi.

**GEOL 781 Geophysics, Exploration Seismology**

L. D. Brown.

**GEOL 783 Advanced Topics in Geophysics**

B. L. Isacks.

**GEOL 789 Lithospheric Seismology (COCORP Seminar)**

L. D. Brown.

**GEOL 793 Andes-Himalaya Seminar**

S. Mahlburg Kay, R. W. Allmendinger, B. L. Isacks, T. E. Jordan.

**GEOL 795 Low Temperature Geochemistry**

L. A. Derry.

**GEOL 796 Geochemistry of the Solid Earth**

W. M. White.

**GEOL 797 Fluid-Rock Interactions**

L. M. Cathles.

**GEOL 799 Soil, Water, and Geology Seminar**

L. M. Cathles, T. S. Steenhuis.

**GERMAN STUDIES**

A. Groos, chair, I. Ezerzailis, director of undergraduate studies; P. U. Hohendahl, director of graduate studies; L. Adelson, D. Bathrick, B. Buettner, H. Deinert, P. Gilgen, B. Martin, A. Schwarz, G. Waite

The Department of German Studies offers students a wide variety of opportunities to explore the literature and culture of German-speaking countries, whether as part of their general education, a major in German Studies

or a double major involving another discipline, preparation for graduate school or an international professional career. Courses are offered in English translation as well as in German; subjects range from medieval to contemporary literature and from film and visual culture to intellectual history, music, history of psychology, and women's studies.

The department's offerings in English begin with a series of Freshman Writing Seminars introducing various aspects of German literature (the fairy-tale and romantic narratives, twentieth-century writers such as Kafka, Hesse, Mann, Brecht), issues in mass culture and modernity, problems of German national identity/ies, and cinema and society. A variety of courses in English translation is also offered on the 300- and 400-level, exploring such topics as the Faust legend, aesthetics from Kant to Heidegger, Freud and his legacy, opera from Mozart to Strauss, the German novel, political theory and cinema, the Frankfurt School, and feminist theory. It may be possible to arrange a German section for courses taught in English, either informally or formally (for credit). Students are encouraged to discuss this possibility with instructors.

Students wishing to begin German at Cornell enroll in GERLA 121-122 in the Department of Modern Languages. Those successfully completing this sequence, and those who place into the 200-level, may pursue further language study in that department or begin with the literature and cultural studies tracks in German Studies. The beginning sequence of 200-level courses in German Studies, with readings and discussion in German, is designed to provide further grounding in the language as well as introduce German literature (GERST 202) and cultural studies (GERST 220). (Beginning in spring 1998, GERST 201 and GERLA 203 were replaced by GERST/GERLA 200.) More advanced courses introduce majors and other qualified students to a broad variety of literary and cultural topics in German-speaking countries.

**Advanced Standing**

Students with an AP score of 4 or better are automatically granted three credits in German. Students with an AP score of 4 or better, an LPG score of 65 or higher, or a SAT II score of 680 or higher must take the CASE examination for placement in courses above GERST/GERLA 200. Students coming to Cornell with advanced standing in German and/or another subject are encouraged to consider a double major and to discuss the options with the director of undergraduate studies as early as possible.

**The Majors**

The department offers two options for the major: German literature/culture and German area studies, the latter a more broadly defined sequence that includes work in related disciplines. The course of study in either major is designed to give students proficiency in reading, speaking, and writing in German, to acquaint them with German culture, and to help them develop skills in reading, analyzing, and discussing German texts in relevant disciplines. For both majors, there is a wide variety of courses co-sponsored with other departments (Comparative Literature; Government; History; Music; Theatre, Film, and Dance; Women's Studies).

The department encourages double majors and makes every effort to accommodate prospective majors with a late start in German. Students interested in a major should consult the director of undergraduate studies, Inta Ezerzailis, 178 Goldwin Smith Hall.

**German (Literature/Culture)**

Although the emphasis of this track is on literature, majors may also pursue individual interests in courses on film and visual culture, theater and performing arts, music, intellectual and political history, and women's studies that have a substantial German component. Please consult with the director of undergraduate studies.

**Admission:** By the end of their sophomore year, prospective majors should have successfully completed GERST 202, GERST 220, or GERLA 204.

To complete the major, a student must:

1. Demonstrate competence in the German language by successful completion of two 300-level courses with intensive language work (GERST 301, 302, GERLA 303, 305) or the equivalent.
2. Complete six courses in German Studies at the 300 level or above. One of these must be the Senior Seminar (GERST 410).

**German Area Studies**

Students select courses from the Department of German Studies as well as courses with a substantial German component from other departments, such as Comparative Literature; Government; History; Music; Theatre, Film, and Dance; Women's Studies.

**Admission:** By the end of their sophomore year, prospective majors should have successfully completed GERST 202, GERST 220, or GERLA 204.

To complete the major, a student must:

1. Demonstrate competence in the German language by successful completion of two 300-level courses with intensive language work (GERST 301, 302, GERLA 303, 305) or the equivalent.
2. Complete six courses with a substantial German component at the 300 level or above. Three of these must be in German Studies, including the Senior Seminar (GERST 410).
3. Select a committee of one or more faculty advisors to help formulate a coherent program of study. One of the advisors must be from the Department of German Studies.

**Study Abroad**

The department encourages undergraduate majors to consider studying abroad for 1-2 semesters, normally during the junior year, as regular students at a German-speaking university. Interested students should consult Bonnie Buettner (German Studies) or Gunhild Lischke (Modern Languages) as early as possible.

**Honors**

**Eligibility:** A student wishing to receive honors in German Studies must have a GPA of 3.5 in all courses relevant to the major.

**Committee:** Candidates for honors form an advisory committee consisting of an advisor

from German Studies and at least one additional member.

**Honors essay:** During the first term of their senior year, students determine the focus of their honors essay through an appropriate course or in independent study under the direction of their advisors. During the second term they complete an honors essay, which will be evaluated by the committee.

**Determination of honors:** An oral examination concludes the process. Honors will be determined by the essay, the exam, and grades in the major.

## Freshman Writing Seminar Requirement

The following courses may be used to satisfy the freshman writing seminar requirement: German 109, 111, 130, 150, 151, 175 and 180. For details, students should consult the instructors.

**Fees.** Depending on the course, a small fee may be charged for film rental or photocopied texts for course work.

## Freshman Writing Seminars

See Freshman Seminar booklet for course times and descriptions.

### GERST 109 From Fairy Tales to the Uncanny: Exploring the Romantic Consciousness

Fall or spring. 3 credits. B. Buettner, P. Gilgen, and staff.

### GERST 111 Workshop in German Studies

Fall. 3 credits. H. Deinert.

### GERST 130 Metropolis, Modernity, and Mass Culture: The Roaring Twenties, German-style

Fall or spring. 3 credits. B. Buettner, P. Gilgen and staff.

### GERST 150 Imagining Germany/s

Fall or spring. 3 credits. B. Buettner, P. Gilgen and staff.

### GERST 151 Kafka, Hesse, Brecht, and Mann

Spring. 3 credits. H. Deinert.

### GERST 175 Cinema and Society

Fall or spring. 3 credits. G. Waite and staff.

### GERST 180 Towards the Net.Citizen: Writing and New Communication Technologies

Fall and spring. 3 credits. B. Buettner and staff.

## Courses Offered in German

### GERST 200 Contemporary Germany (also GERLA 200)

Fall and spring. 3 credits. Prerequisite: qualification in German (LPG score of 56-64 or SAT II score of 580-670 or GERLA 123). Fulfills the Arts and Sciences language proficiency requirement and can be used in partial fulfillment of the Arts and Sciences humanities distribution requirement. Staff.

An intermediate language course designed to provide an introduction to modern German culture and literature while students develop language proficiency. Students examine issues that shape German society, literature, and thought as reflected in short stories, poems, socio-cultural and political texts,

video, and audio materials. Selected themes include "Beyond the Wall: German Unification," "Germany: a Multi-cultural Society?," "Speaking and Identity," and "Musikszene." Oral and written work and individual and group presentations emphasize accurate and idiomatic expression. Successful completion of the course enables students to continue with more advanced courses in language, literature and culture. This course replaces GERST 201 and GERLA 203.

### GERST 202 Exploring German Literature

Fall or spring. 3 credits. Prerequisite: GERST/GERLA 200, GERLA 203 or permission of instructor. Taught in German. Can be used in partial fulfillment of the humanities distribution requirement. B. Buettner and P. Gilgen.

In this intermediate course, we will read and discuss a number of works belonging to different literary genres by major German-speaking authors, such as Kafka, Walser, Brecht, Mann, Frisch, Dürrenmatt, Bachmann, and others. We will explore questions of subjectivity and identity in modern society, of human existence as existence in language, and of the representation of history in literary texts. Activities and assignments in this course will focus on the development of reading competency in different literary genres, the use of accurate and idiomatic expressions, the expansion of students' German vocabulary, and the systematic review of select topics in German grammar.

### GERST 220 Was ist deutsch?

Spring. 3 credits. Taught in German. Prerequisite: one German course at the 200 level. B. Buettner.

Questions of German identity have always raised difficult issues—both for Germans themselves and for others. These issues are again taking center stage as Germans redefine themselves in a reunified Germany. How has the concept of "Germanness" evolved? How do past perceptions of identity impinge on the present? Through selections from film, literature, art, and music we will explore this peculiarly German question.

### GERST 301 Scenes of the Crime: Germany Mystery and Detective Fiction

Fall. 4 credits. Prerequisite: GERST 202, or 220, or GERLA 204, or equivalent. Taught in German. P. Gilgen.

An exploration of German crime, detective, and mystery writing in texts ranging from the eighteenth century to contemporary fiction. Authors to be studied may include: Kleist, E. T. A. Hoffmann, Kafka, Dürrenmatt, Handke, Schatten, Susskind. This course aims at improving proficiency in aural and reading comprehension, as well as speaking and writing skills, with emphasis on vocabulary expansion, advanced grammar review, and stylistic development. Recommended for students interested in a combined introduction to literature and high-level language training. This course may be counted toward the requirement for 300-level language work in the major.

### GERST 307 Modern Germany

Not offered 1998-99.]

### GERST 315 From Dawn Song to Requiem: Introduction to German Poetry

Not offered 1998-99.]

### GERST 342 The New Europe (also GOVT 342)

Not offered 1998-99.]

### GERST 353 Kleist #

Not offered 1998-99.]

### GERST 354 Schiller #

Spring. 4 credits. Prerequisite: GERST 202 or permission of instructor. Texts in German, seminar discourse in German and English. H. Deinert.

He grew up in poverty and remained poor most of his life. He wanted to study theology but his sovereign forced him into law, then military medicine. His first drama made him a household word overnight, and a penniless fugitive. A poorly paid professor of history at Jena he succumbed to pneumonia and remained in precarious health for his remaining fifteen years. Yet when he died at forty-five he left a legacy of poetry and drama, of historical, aesthetic and political writings rivaled in impact and lasting influence only by his contemporary Goethe. We will examine his major works against the background of revolutionary turmoil in Europe and the Americas.

### GERST 357 Major Works of Goethe (1749-1832) #

Not offered 1998-99.]

### GERST 365 Austrian Literature

Not offered 1998-99.]

## Courses in English Translation

It may be possible to arrange a German section for courses taught in English, either informally or formally (for credit). Students are encouraged to discuss this possibility with instructors.

### GERST 320 Postwar German Novel

Not offered 1998-99.]

### GERST 330 Political Theory and Cinema (also COM L 330, GOVT 370 and THETR 329)

Not offered 1998-99.]

### GERST 374 Opera and Culture (also MUSIC 374 AND ITAL 374)

Not offered 1998-99.]

### GERST 378 German Aesthetic Theory: From Kant to Hegel #

Not offered 1998-99.]

### GERST 383 German Literature of the Twentieth Century

Not offered 1998-99.]

### GERST 396 German Film (also COM L 396 and THETR 396)

Not offered 1998-99.]

### GERST 398 The Poetic and the Political: A Look at Some German Women Writers

Fall. 4 credits. In English translation. There may be additional sessions to accommodate those who want to work on their spoken German. I. Ezergailis. "If one does not read the most complex poetic text, one risks not knowing how to read the newspaper, but being read by it." (Helene Cixous) Is there such a thing as the "purely" poetic? What does it mean for poetry and poetic prose to touch on the political? What does it mean to a woman writer? We will examine some of these questions through a careful reading of texts by selected German women writers. The texts are mainly from the twentieth century, with a few earlier ones.

Poetry and prose by Anna Seghers, Else Lasker-Schüler, Nelly Sachs, Sarah Kirsch, Ingeborg Bachmann, Christa Wolf, and several other authors.

**GERST 403 The Afro-Europeans (also S HUM 403)**

For description, see S HUM 403.

**[GERST 408 Uncanny Communities (also S HUM 408)]**

Not offered 1998-99.]

**GERST 409 Spinoza and Virtual Ideology (also S HUM 409)**

For description, see S HUM 409.

**[GERST 413 Women around Freud (also COM L 412 and WOMNS 413)]**

Not offered 1998-99.]

**[GERST 414 History into Fiction: Nazis and the Literary Imagination (also ENGL 404, COM L 404, and NES 404)]**

Not offered 1998-99.]

**GERST 415 Marx, Freud, Nietzsche (also COM L 425 and GOVT 473)**

Spring. 4 credits. G. Waite.

There are three main aspects to this course. First and primarily, it provides an introduction to the thinking of these three "master thinkers" who have determined much of modernity and postmodernity. Here, basic aspects of their work are considered: (a) scientific and theoretical writings; (b) specific critical and historical analyses; (c) programs and manifestos; and (d) styles of argumentation, documentation, and persuasion. (This also entails an introduction, for non-specialists, to basic problems of economics, philosophy, psychology—and literary criticism.) Second, we will compare and contrast the underlying assumptions and interpretive yields of the various disciplines and practices that Marx, Nietzsche, and Freud helped to ground: historical materialism and communism; power-knowledge analysis; and psychoanalysis, respectively. Finally, but less thoroughly, we will discuss the ways these three thinkers have been fused together into a single constellation or triad: "Marx-Nietzsche-Freud." The main focus of the course will be on primary texts, which might include, e.g.: (Marx) *The Communist Manifesto*, *The 18th Brumaire*, *Critique of the Gotha Program*, and selections from *The Paris Manuscripts*, *Grundrisse*, and *Capital*; (Nietzsche) *The Birth of Tragedy*, "The Greek State," "On Truth and Lie in the Extramoral Sense," *On the Use and Disadvantage of History for Life*, and selections from *Thus Spoke Zarathustra* and *The Genealogy of Morals*; and (Freud) two case studies, *On Dreams*, *Civilization and Its Discontents*, *Three Essays on the Theory of Sexuality*, and selections from *The Psychopathology of Everyday Life* and *Introductory Lectures*.

**[GERST 418 Thomas Mann]**

Not offered 1998-99.]

**GERST 428 Genius and Madness in German Literature (also COM L 409)**

Spring. 4 credits. Taught in English. A. Schwarz.

An analysis of the cult of genius and its kinship to madness in texts ranging from the eighteenth to the twentieth century. Discussion of changing definitions of creativity as ingenuity, inspiration, or insanity; divine possession, originality, or fanatic enthusiasm. Special focus on social and artistic transgression; genius and gender; passions and pathological disorders. Authors include

Aristotle, Goethe, Kant, Hoffman, Kleist, Foucault, Felman, Buchner, Nietzsche, Freud, Mann, Musil, Jelinek, Kafka.

**Course in Latvian and Baltic Literature**

**GERST 377 Baltic Literature (also RUSSL 377)**

Spring. 4 credits. In English translation. I. Ezergailis.

Estonia, Latvia, and Lithuania have created a rich literary tradition since the beginning of a written indigenous culture in the 19th century. We will read dramas from each of these literatures, selected for their quality, importance, and the availability of acceptable translations, representing, as much as possible, writers from the pre-Soviet independence period, those writing under Soviet rule, and émigrés.

**Graduate and Advanced Undergraduate Courses**

**[GERST 405 Introduction to Medieval German Literature I #]**

Not offered 1998-99.]

**[GERST 406 Introduction to Medieval German Literature II #]**

Not offered 1998-99.]

**GERST 410 Senior Seminar**

Fall. 4 credits. Taught in German. Topic: Beginnings and Endings: 1900 and 2000 in German Literature. A. Schwarz.

Examination of dominant artistic movements at two historical junctures: 1900 and 2000 seen as central turning points in German literature, art, science, and culture. Comparative study of differing projects of modernity; attitudes towards tradition and heritage; two versions of decline and hope. Focus on avant-garde movements and various social agendas of literature, with special emphasis on the relationship between aesthetics and politics. Authors include: Bahr, Hofmannsthal, Kraus, Nietzsche, George, Schnitzler, Freud, Rilke, Bernhard, Enzensberger, Strauss, Goetz.

**[GERST 412 German Literature from 1770 to 1848 #]**

Not offered 1998-99.]

**GERST 417 Faust: Transformations of a Myth (also COM L 417) #**

Fall. 4 credits. Reading knowledge of German required. Taught in English. Several required screenings outside of class. H. Deinert.

Few legends have so engaged the imagination as that of the man who signed a pact with the devil to obtain pleasure, power, and knowledge. While the myth itself is timeless, the modern version takes its cue from one real Georg Faust, a magician and erratic scholar of dubious character during the time of the German Reformation. The German *Volksbuch* depicting his adventures eventually became the inspiration for Marlowe's *Tragical History of Doctor Faustus*. Goethe devoted some sixty years to his *Faust*, completing it only months before his death in 1832. Marlowe's Faust is sent to hell for his hubris; Goethe's protagonist finds favor with God for the same reason. We will look at various representations of the myth through the centuries, concentrating on the late 16th through the early 19th. The *Faust Book*, Marlowe, Lessing and Goethe will be our main texts. We will listen to some of the music they have inspired: Berlioz, Gounod, Mahler; and look at related mythical figures like Lucifer, Prometheus, Don Juan, Ahasverus, Schlemiel and others. Time

permitting, we will discuss selections from two recent versions: Valéry's *Mon Faust* (1940) and Thomas Mann's *Doktor Faustus* (1947).

**[GERST 430 Brecht, Artaud, Müller, Wilson (also COM L 430 and THETR 420)]**

Not offered 1998-99.]

**[GERST 435 Introduction to Literary Theory (also COM L 435)]**

Not offered 1998-99.]

**[GERST 447 Reading Freud: Gender, Race, and Psychoanalysis (also COM L 447 and WOMNS 447)]**

Not offered 1998-99.]

**GERST 451-452 Independent Study**

451, fall; 452, spring. 1-4 credits each term. Prerequisite: permission of instructor.

**[GERST 472 Poetry of the 1990s (also COM L 472)]**

Not offered 1998-99.]

**[GERST 492 The Advance of Humanism: Aspects of the European Enlightenment #]**

Not offered 1998-99.]

**[GERST 495 The Aesthetic Theory of the Frankfurt School (also COM L 495)]**

Not offered 1998-99.]

**[GERST 496 Theorizing the Public Sphere (also COM L 496 and HIST 496)]**

Not offered 1998-99.]

**GERST 498 German Literature in Exile**

Spring. 4 credits. Taught in German.

I. Ezergailis.

The Nazi rise to power forced many Germans and Austrians—among them intellectuals, writers, and artists—into exile in the U.S., the Soviet Union, England, Mexico, and elsewhere. Writers found exile particularly hard, since in most cases they no longer had a readership and were separated from the language in which they wrote. The literary production of authors like Thomas Mann, Else Lasker-Schüler, Bertolt Brecht, Robert Musil, Anna Seghers, Alfred Döblin, and Nelly Sachs reflect both this historical context and the personal trauma of those years. We will read some of the texts of these writers while also thinking more generally about the condition of exile and its various effects.

**Seminars**

Note: For complete descriptions of courses numbered 600 or above consult the appropriate instructor.

**[GERST 600 Special Topics in Feminist Theory (also ANTHR 600 and COM L 600)]**

Not offered 1998-99.]

**[GERST 608 Modern/Postmodern (also COM L 608)]**

Not offered 1998-99.]

**[GERST 615 Jews in German Culture Since 1945 (also JWST 615)]**

Not offered 1998-99.]

**[GERST 621 Issues in Gay and Lesbian Studies (also WOMNS 621)]**

Not offered 1998-99.]



**[GERST 624 Seminar in Medieval German Literature II]**  
Not offered 1998–99.]

**GERST 626 Nuremberg**

Fall. 4 credits. Prerequisite: permission of instructor. Anchor course for the 16th century. A. Groos.

An introduction to Nuremberg in the late fifteenth and sixteenth centuries, with emphasis on its significance as an early modern urban center. Topics include the city's development and social structure, pre- and post-Reformation attempts to fashion its image and history, public spectacle and imperial entries, literary and artistic humanism (Celtis and Dürer), social order and social conflict (*Fastnachtspiel*, anti-Semitism), constructions of gender and marginal figures. The last part of the course will deal with the reception of early modern Nuremberg from Goethe through the Romantics, including Wagner.

**[GERST 627 Baroque (also COM L 626)]**  
Not offered 1998–99.]

**[GERST 629 The Enlightenment]**  
Not offered 1998–99.]

**GERST 630 Classicism and Idealism**

Spring. 4 credits. Texts in German. Anchor course. P. U. Hohendahl.

An introduction to some of the major poetic and philosophical texts generally considered to be part of the period of German Classicism (1785–1805), while at the same time giving reasons to call into question notions of periodization of the canon, particularly as they have excluded women and lower social classes. In addition to the basic problem of the appropriation of classic antiquity at a time marked by the transition to bourgeois modernity, special consideration will be given to the emergence of modern aesthetic theory as well as its impact on literary production and reception. Specifically the seminar will focus on the problem of subject formation in the context of modernity as it is expressed in the concept of "Bildung." Special emphasis will be placed on the gendering of the concept. Readings will be taken from the works of Goethe, Herder, Humboldt, Kant, Moritz, and Schiller among others. While the main focus of the seminar will be on primary texts, we will also consider contemporary criticism on the concept of Classicism and its problems.

**[GERST 634 German Romanticism]**  
Not offered 1998–99.]

**[GERST 635 The Gates to Modernity: From Karlsbad to the 1848 Revolution]**  
Not offered 1998–99.]

**GERST 637 19th-Century Fiction: The Realist Project**

Spring. 4 credits. Anchor course. A. Schwarz.

Examination of programmatic concepts of Poetic Realism in literature and theory. Special focus on the relationship between aesthetic theory and literary production (Hegel, Vischer, Schopenhauer, Nietzsche). The course will discuss the tension between the "prosaic" and "poetic" by investigating the status of topics such as "love," "adventure," and domesticity; suburban and garden spaces; the aestheticization of "work" and the "reality" of industrialization. Further attention will be paid to artistic developments that anticipate

literary periods such as Naturalism, Expressionism and the Avant-garde. Questions of nationalism, science, and generic issues will be discussed in comparison to European developments of Realism. The seminar will also focus on contemporary reelaborations of the Realist project: in relation to psychoanalysis, narrative theory, and current theories of memory, community, and spatial structures (architectonic or mnemonic). Authors include: Hegel, Vischer, Tieck, Keller, Droste-Hülshoff, Freytag, Fontane, Schmidt, Meyer, Raabe, Nietzsche, Freud.

**[GERST 647 German Literature from 1949 to 1989: Questions about Identity]**  
Not offered 1998–99.]

**[GERST 650 Culture in the Weimar Period]**  
Not offered 1998–99.]

**[GERST 652 Culture in Germany 1933–1945]**  
Not offered 1998–99.]

**[GERST 653 Opera (also COM L 655 and MUSIC 679)]**  
Not offered 1998–99.]

**GERST 656 Aesthetic Theory: The End of Art (also COM L 656)**

Spring. 4 credits. P. Gilgen.  
The course investigates the emergence of aesthetics as its own discipline at the end of the eighteenth century. In a first phase, we will examine the rationalist articulation of aesthetics in Baumgarten's work and the empiricist theory of taste, particularly Burke's *Enquiry*. Drawing on the findings of these two traditions, Kant's *Critique of Judgment* (1790) inaugurated a preoccupation in German philosophy around 1800 with the philosophical status of the beautiful and of art. Especially in Romantic theory and practice, art was meant to provide a solution to the philosophical dilemmas in the wake of Kant's critical philosophy. But already in Hegel's *Phenomenology*, and more explicitly in the *Encyclopedia* and the *Lectures on Aesthetics*, art lost this elevated position vis-à-vis philosophy. Taking this observation as a guiding thread, the main part of the course is structured around in-depth readings of Kant, Schiller, Schelling, Schlegel, Novalis, Hyldebrandt, and Hegel. Further readings will include writings by contemporary philosophers and theoreticians—such as Derrida, Lyotard, de Man, Adorno, and Danto—whose work on aesthetics takes its starting point from the philosophical issues surrounding the emergence of aesthetic theory only to transcend these historical confines and formulate contemporary positions on the status of the aesthetic. The following questions will be addressed: What are the conditions for the move from the subjective judgment of taste (Kant) to objective beauty (Romantics, Hegel)? How is the relation of art and nature reconceived by the Romantics? What is the relation of aesthetic theory and the history of art? Is philosophy the end of art?

**[GERST 660 Visual Ideology (also COM L 660 and THEAT 660)]**  
Not offered 1998–99.]

**[GERST 661 After the City: From Metropolis to Electropolis (also ARCH 338/638 and COM L 661)]**  
Not offered 1998–99.]

**[GERST 663 Nietzsche and Heidegger (also COM L 663)]**  
Not offered 1998–99.]

**[GERST 664 Freud and the *Fin de siècle*]**  
Not offered 1998–99.]

**[GERST 666 Ingeborg Bachmann]**  
Not offered 1998–99.]

**[GERST 667 "Minor" German Literatures?]**  
Not offered 1998–99.]

**GERST 668 Literature and the Uncanny (also COM L 664)**

Fall. 4 credits. A. Schwarz.  
An analysis of the relationship between literature and the uncanny phenomena such as ghosts, doubles, and automatons. Discussion of varying figurations and effects of the "uncanny" on narrative and social structures in texts ranging from the late 18th to the early 20th century. Special focus on questions of spatiality, sociality, gender, trauma, and communities. Primary authors include: Freud, Heidegger, Benjamin, Hoffmann, Goethe, Tieck, Stifter, Hawthorne, Keller, Hofmannsthal, Kafka, Rilke.

**[GERST 671 Postcolonial Theory and German Studies]**  
Not offered 1998–99.]

**GERST 672 Wagner (also Music 674)**

Spring. 4 credits. A. Groos.  
This seminar will focus on the operas and theoretical writings of Wagner in the period from *Die Feen* (1834) to *Tristan und Isolde* (1861), examining the composer's struggle to transcend contemporary genre expectations and establish himself in the forefront of German operatic practice. Although discussion will center around representatives from the apprentice operas (*Die Feen*, *Das Liebesverbot*, *Rienzi*) and first long-term successes (*Der fliegende Holländer*, *Tannhäuser*, *Lohengrin*), and especially *Tristan*, the scope of the sessions can be extended according to group interest to other contemporary opera composers (Weber, Schumann, Spohr, Flotow, etc.)

**[GERST 674 Contemporary Poetry and Culture: 1968–1993 (also COM L 674, ENGL 697 and SPAN L 674)]**  
Not offered 1998–99.]

**[GERST 675 After the Divide: German Critical Theory of the Seventies and Eighties (also COM L 675 and HIST 675)]**  
Not offered 1998–99.]

**[GERST 679 Bertolt Brecht in Context (also COM L 679 and THEAT 679)]**  
Not offered 1998–99.]

**[GERST 685 Gramsci and Cultural Politics (also COM L 685 and GOVT 675)]**  
Not offered 1998–99.]

**GERST 686 Althusser and Lacan (also COM L 686, GOVT 679, and FRLIT 623)**

Spring. 4 credits. Enrollment limited to twelve. G. Waite.  
This graduate seminar takes up the old 'dialogue' or 'confrontation' between Marxism and psychoanalysis, as it continues in our 'post-linguistic' and 'post-communist' era, by studying selected works of Louis Althusser and Jacques Lacan. In general, the seminar has two obvious tasks: to compare and

contrast these two seminal but not equally influential, and perhaps not equally significant thinkers. In specific, we will study such topics as: the nature of their friendship (Lacan's influence on Althusser's published work as a 'one way street,' including the latter's unrequited attempt to elicit explicit response from the former); the role of Lacanian concepts in Althusser's private self-analysis; points of common interest (Spinoza, Kant, Hegel, Marx, Freud, and epistemology); the parallel between the 'return to Marx' and the 'return to Freud'; their modes of interpretation and argumentation; the relationship between 'philosophical psychoanalysis' and 'symptomatic reading'; the question whether 'ideology is (the) unconscious'; their critiques of Marxism, Stalinism, and capitalism; the concept of 'structure'; and the nature of their influence.

**[GERST 687 The Politics of Culture in the German Democratic Republic]**  
Not offered 1998-99.]

**GERST 689 Art and Truth: The Aesthetic Theory of Theodor W. Adorno (also COM L 689)**

Fall. 4 credits. P. U. Hohendahl.  
The seminar will focus on the aesthetic writings of Adorno, beginning with relevant chapters from *Dialectic of Enlightenment* as well as selected essays on European literature and music. The emphasis then will be placed on Adorno's major posthumous work: *Aesthetic Theory* (1970). The aim is a close reading of Adorno's theory in the context of the Kantian and Hegelian tradition.

**[GERST 690 Feminist Criticism and Theory (also WOMNS 690)]**  
Not offered 1998-99.]

**[GERST 699 German Film Theory (also COM L 699 and THETR 699)]**  
Not offered 1998-99.]

**GERST 753-754 Tutorial in German Literature**

Fall and spring. 1-4 credits per term.  
Prerequisite: permission of instructor.

## Related Courses in Other Departments

### Government

**GOVT 332 Modern European Politics**  
Spring. D. Schirmer.

**GOVT 342 United Germany in the New Europe**  
Spring. P. Katzenstein.

**GOVT 380 The Politics of Modern Germany**  
Fall. D. Schirmer.

### History

**HIST 363 European Cultural History**  
Fall. M. Steinberg.

**HIST 379 The First World War**  
Fall. I. V. Hull.

**HIST 400 Seminar in Later 19th-Century European Imperialism**  
Spring. I. V. Hull.

**HIST 605 European Culture and Intellectual History**  
Fall. M. Steinberg.

### Linguistics

**LING 645 Gothic**  
Spring. W. Harbert.

### Modern Languages

**LANG 501 Teaching Second Languages**  
Fall. J. Lantolf.

## GOVERNMENT

I. Kramnick, chair; B. R. O'G. Anderson, R. Bensel, M. G. Bernal, S. Buck-Morss, R. Bullock, V. Bunce, T. Christensen, J. Cowden, M. Evangelista, R. Herring, N. Hirschmann, M. Katzenstein, P. Katzenstein, E. W. Kelley, J. Kirshner, T. J. Lowi, R. McDermott, W. Mebane, J. Pontusson, J. Rabkin, E. Sanders, H. Schamis, M. Shefter, V. Shue, A. M. Smith, S. G. Tarrow, N. T. Uphoff, C. Way

Government is what Cornell calls a department that elsewhere might be termed political science. The focus of this discipline is power applied to public purposes. Some faculty concentrate on purposes, some on applications. Some engage in the close reading of great texts of political philosophy, while others analyze the behavior of power-wielders and publics in this and other societies. Government is divided into four subfields: U. S. politics, comparative politics (other nations), political theory (philosophy), and international relations (transactions between nations).

To accommodate new courses or course changes, a supplementary announcement is prepared by the department. Before enrolling in courses or registering each term, students are requested to consult the current supplement listing courses in government, available in 125 McGraw Hall.

### The Major

**To be admitted to the major**, a student must pass two government courses.

**To complete the major**, a student must (1) pass two of the introductory government courses (Government 111, 131, 161, 181); (2) pass an additional course in one of the remaining subfields (American government, comparative government, political theory, or international relations). This course may be any course offered in the government department, including introductory courses, upper-level courses or seminars. Students are strongly advised to take at least one course in each of the four subfields; (3) accumulate an additional 28 credits of government course work at the 200-level or above; (4) complete at least one seminar-style course in government which may be applied toward the 28 credits. These courses include those numbered 400.XX to which students are admitted by application only; (5) accumulate 12 credits in upper-level courses in related fields (such as anthropology, economics, history, psychology, and sociology). Upper-level courses are usually courses numbered at the 300-level or above (200-level courses are not considered upper-level). Students should consult with their major adviser to choose appropriate courses. All choices of related courses must be approved by the major adviser, or the director of undergraduate studies; (6) all courses used to fulfill a

government major must be passed with a letter grade.

To summarize, a total of 10 government courses and 3 additional courses (12 credits) of upper-level related courses are required to complete the major.

**Cornell-in-Washington Program.** Government majors may apply to the Cornell-in-Washington program to take courses and undertake a closely supervised externship during a fall or spring semester.

**Study Abroad in Geneva.** French, history, and government majors, or other students with a commitment to international experience, may study abroad in Geneva, Switzerland. Geneva is an especially appropriate location for students with an interest in international affairs, as many international organizations maintain offices there, among them the United Nations, the Red Cross, the Headquarters of the World Health Organization, the International Labor Organization, the International Telecommunications Union, the World Intellectual Property Organization, the European Nuclear Research Center, and the Ecumenical Center at Grand-Saconnex. Cornell students enroll full-time in the University of Geneva and affiliated schools, including the Graduate School of International Studies (HEI) and the Development Studies Institute, where they take year-long courses, studying with Swiss and international students. They can choose classes in many subjects, including literature, economics and other social sciences, law, theology, psychology, education, architecture, physical education, and French language, civilization and history.

The University of Geneva offers four consecutive three-week language and civilization summer courses beginning in mid-July, which prepare students for the mandatory French exam given in early October. Cornell students must attend the last of these sessions, from mid-September to early October, but earlier sessions are recommended for students who need additional language preparation.

Interested students can participate in internships at international organizations, and qualified participants may be able to work under the direction of officials on research studies that are of mutual interest.

Students must be Cornell undergraduates with a strong academic record. The minimum French preparation is the completion of French 204 or 213, or its equivalent in advanced credit or placement by the Cornell C.A.S.E. examination. Students should plan to study abroad for the entire academic year. Students interested in the study abroad program in Geneva should contact the Cornell Abroad office (474 Uris) for further information.

**European Studies Concentration.** Government majors may elect to group some of their required and optional courses in the area of European studies, drawing from a wide variety of courses in relevant departments. Students are invited to consult Professors P. Katzenstein, J. Pontusson, and Tarrow for advice on course selection and foreign study programs.

**Model European Community Simulation.** Undergraduates with an interest in the European Union, public affairs or debating may participate in an annual European Union simulation held, on an alternating basis, in

April at SUNY Brockport or in January in Brussels. The simulation provides an opportunity for participants, representing politicians from the member states, to discuss issues and resolutions of current concern to the EU.

To prepare for the simulation, a two-credit course is offered by the Government department each year (Government 431 or Government 432). Participation in the simulation is open only to those who register for this course. Anyone interested in participating or finding out more information should contact the Institute for European Studies at 120 Uris Hall, 255-7592.

**International Relations Concentration.** See the description under "Special Programs and Interdisciplinary Studies."

**Honors.** In their junior year, Government majors with a G.P.A. of 3.30 in all subjects may join the honors program, which involves a sequence of special courses in the junior and senior year. Application to the honors program will be made in the late spring of the sophomore year and application forms will be available in 125 McGraw Hall. The courses comprising the honors sequence (honors courses) are described below. Students may be admitted to the honors program in the junior or senior year only with the special permission of the Director of Undergraduate Studies.

## Introductory Courses

Students registering for introductory courses should register for the lecture only. Sections will be assigned during the first week of class. Introductory courses are also offered during summer session.

### GOVT 111 Introduction to American Government and Politics

Fall and summer. 3 credits. T. J. Lowi. An introduction to government through the American experience. Concentration on analysis of the institutions of government and politics as mechanisms of social control.

### GOVT 131 Introduction to Comparative Government and Politics

Fall and summer. 3 credits. V. Bunce. This course provides a survey of the institutions, political processes, and policies of contemporary states. It focuses on the conditions for and workings of democracy. Looking at Western Europe, we will analyze institutional variations among liberal democracies, and their political implications. We will then probe the origins of democracy in Western societies and the reasons why communism and other forms of authoritarian rule have prevailed elsewhere. Finally, we will explore the impetus behind and the obstacles to democratization in the Third World and the erstwhile Communist Bloc. Throughout this survey, problems of democracy will be related to problems of economic development, efficiency, and equality.

### GOVT 161 Introduction to Political Philosophy #

Spring. 3 credits. I. Kramnick. A survey of the development of Western political theory from Plato to the present. Readings from the works of the major theorists. An examination of the relevance of their ideas to contemporary politics.

### GOVT 181 Introduction to International Relations

Spring and summer. 3 credits. M. Evangelista.

An introduction to the basic concepts and practice of international politics.

## Freshman Writing Seminars

### GOVT 100 Freshman Seminars

Fall, spring, or summer. 3 credits. Seminars will be offered in fall, spring, and summer terms. Consult the listings for the Freshman Seminar Program in the section "Special Programs and Interdisciplinary Studies," the supplement issued by the department, and the Freshman Seminar booklet for course descriptions and instructors.

## Major Seminars

### GOVT 400 Major Seminars

Fall or spring. 4 credits.

These seminars, emphasizing important controversies in the discipline, cap the majors' experience. Thus preference in admission is given majors over nonmajors and seniors over juniors. Topics and instructors change each semester. To apply, students should pick up an application in 125 McGraw Hall during the course selection period the semester before the seminar is given.

The following courses are open to sophomores, juniors, and seniors without prerequisites unless otherwise indicated.

## American Government and Institutions

Government 111 is recommended.

### [GOVT 121 Economic Growth and Democratic Legitimacy

3 credits. Not offered 1998-99.]

### [GOVT 302 Social Movements in American Politics (also American Studies 302)

4 credits. Not offered 1998-99.]

### [GOVT 303 Introduction to American Political Parties

4 credits. Not offered 1998-99.]

### GOVT 305 Atomic Consequences: The Incorporation of Nuclear Weapons in Post-War America

Spring. 4 credits. M. Dennis. For description, see S&TS 350.

### [GOVT 308 Science in the American Polity 1800-1960

3 credits. Not offered 1998-99.]

### GOVT 309 Science in the American Polity

Spring. 4 credits. M. Dennis. For description, see S&TS 391.

### GOVT 310 Power and Poverty in America

Fall. 4 credits. E. W. Kelley. Despite egalitarian democratic rights, the United States remains a stratified society conspicuous for great disparities in the allocation of income and wealth. The purpose of this class is to investigate these disparities, both empirically and normatively, and to assess the impact of government upon them. Topics for discussion will include: what do we mean by distributional inequality

and by the demand for greater egalitarianism? What is the extent of inequality and of poverty in America today? How does one establish minimum standards for distributional justice? Is the United States currently on the road toward achieving that minimum standard? What is the array of federal welfare programs presently available and what is their effect? What reforms or changes are currently on the political agenda? Can we imagine a society somewhat like that in the United States achieving a very different distribution of educational and occupational outcomes as described by race, income, class, and language spoken by parents?

### GOVT 311 Urban Politics

Spring. 4 credits. M. Shefter.

The major political actors, institutions, and political styles in large American cities: mayors, city councils, bureaucracies, ethnic and racial minorities, urban machine politics and the municipal reform movement. The implications of these political forces for policies pertaining to urban poverty, homelessness, and criminal justice.

### GOVT 313 The Nature, Functions, and Limits of Law

Fall. 4 credits. Undergraduates only. Staff.

A general education course for students at the sophomore and higher levels. Law is presented not as a body of rules but as a set of varied techniques for resolving conflicts and dealing with social problems. The roles of courts, legislatures, and administrative agencies in the legal process is analyzed, considering also the constitutional limits on their power and practical limits of their effectiveness. Assigned readings consist mainly of judicial and administrative decisions, statutes and rules, and commentaries on the legal process. Students are expected to read assigned materials before each class and to be prepared for participation in class discussion.

### GOVT 316 The American Presidency (also American Studies 316)

Fall. 4 credits. E. Sanders.

Analysis of the politics of the presidency and the executive branch with emphasis on executive-legislative relations, executive branch policymaking, and the problems of the modern presidency.

### GOVT 317 Campaigns and Elections

Fall. 4 credits. W. Mebane.

This course examines campaigns and elections, focusing primarily on national elections in the United States. Topics include the relationship between elections and the economy, the weakness of the American party system, voter turnout, individual voting decisions, negative campaigning, and the noncompetitiveness of congressional elections. We examine several theories that explain these phenomena, including in particular the theory of rational choice. Course requirements include one or two papers based on original analysis of election survey data.

### [GOVT 318 The American Congress

4 credits. Not offered 1998-99.]

### GOVT 320 Public Opinion and Public Choice

Spring. 4 credits. Prerequisite: Government 111 or permission of the instructor. W. Mebane.

A fundamental paradox in democracy is the fact that a government the people control will

only rarely be a government that does what the people want. This is not to say that government NOT by the people is better (it's usually worse). This course explores this problem, contrasting the answers given by the concept of public opinion and the formal theory of social choice. We encounter the paradox in several American political institutions, including elections, legislatures, and bureaucracy.

**GOVT 324 Legal Reasoning and Legal Adaptation: A Comparison of American and Talmudic Law**  
Spring. 4 credits. J. Rabkin.

Legislatures may change old laws to reflect new preferences, but much American law is still adapted to modern challenges by judges invoking old precedents and principles, particularly in fields like family law, the law of contracts, and the law of torts. Talmudic law, which rests on much older principles and precepts and cannot fall back on new legislation to justify change in the modern world, must also be adapted to new circumstances. The rabbinic authorities who seek to apply this law often invoke similar kinds of reasoning as American courts but under peculiar constraints. This course, an unusual venture in comparative law, will focus on characteristic modes of reasoning in each system, rather than attempting any systematic surveys of legal outcomes. Readings will include selections from ancient texts as well as modern decisions and contemporary commentaries. No previous background is required.

**[GOVT 327 Civil Liberties in the United States]**  
4 credits. Not offered 1998-99.]

**[GOVT 328 Constitutional Politics: The United States Supreme Court]**  
4 credits. Not offered 1998-99.]

**GOVT 353 Feminism Movements and the State (also Women's Studies 353)**  
Fall. 4 credits. M. Katzenstein.

This course focuses on women's activism and the American state. The subject emphasis and format (lecture, sections, tutorials) of this course changes each year and is announced on the first day of class. Active class discussion and extensive writing will be encouraged whatever the particular format of this coming year's class organization. Interested students should pre-register (in order that we may estimate possible class number), but final admission to the class is contingent on application to be completed at the first meeting of the class.

**[GOVT 401 Introduction to Science and Technology Policy (also S&TS 431)]**  
4 credits. Not offered 1998-99.]

**[GOVT 402 Public Opinion and Mass Political Behavior]**  
4 credits. Not offered 1998-99.]

**GOVT 405 Government and the Economy (also GOVT 705)**

Fall. 4 credits. E. W. Kelley.  
What would Adam Smith and Karl Marx consider the causes of such problems as stagflation, an unfavorable balance of trade, the threat of protectionism, the growth of massive public and private sector bureaucracies, and excessive government regulation? What suggestions would they make about remedies? How can we evaluate both their suggestions, and their evidence? Is represen-

tative democracy itself part of the problem? Can Woodrow Wilson, Thomas Jefferson, or Grant McConnell help us understand the effects of legislative behavior on economic transactions? This course will use selected works of Smith, Marx, Durkheim, Wilson and more recent authors like Mancur Olson, Bendix, and McConnell. Substantive focus will be on classical political economy; the development of the state; the rise of professions, guilds, and labor unions; regulation and the increased delegation of public authority to private groups. Methodological focus will be on the ways of evaluating both discursive and quantitative evidence for the factual and causal claims of the authors read.

**GOVT 406 Politics of Education (also GOVT 706)**

Spring. 4 credits. E. W. Kelley.  
Education is simultaneously America's biggest business and the institutional process through which skills and values are passed on to the next generation. This course deals with conflicts about, and the politics of, education as they occur at national, state, and local levels. What (including values) will be taught and to whom; who will benefit from formal education as a vehicle for entry into economic opportunity? What are the powers and restrictions on government in this area? How does the American system differ from other systems? How does educational testing affect equal opportunity to obtain meaningful competencies and jobs?

**[GOVT 407 Law, Science, and Public Values (also S&TS 407)]**  
4 credits. Not offered 1998-99.]

**[GOVT 409 Racial Prejudice and Political Intolerance]**  
4 credits. Not offered 1998-99.]

**[GOVT 413/613 Finance, Federalism, and Politics]**  
4 credits. Not offered 1998-99.]

**[GOVT 427 The Politics of Environmental Protection in America]**  
4 credits. Not offered 1998-99.]

**GOVT 428 Government and Public Policy: An Introduction to Analysis and Criticism**

Fall. 4 credits. T. J. Lowi.  
Government 428 concentrates on history and criticism of U.S. policies and the politics associated with them. Particular attention given to the origins and character of the regulatory state and the welfare state.

**GOVT 429 Government and Public Policy: An Introduction to Analysis and Criticism**

Spring. Open to undergraduates. 428 and consent of instructor are required for 429.  
T. J. Lowi.

Government 429 is an opportunity to pursue further the research begun in 428.

## Comparative Government

Government 131 is recommended.

**GOVT 251 The Politics of Economic Life**

Fall. 4 credits. J. Kirshner.  
Who gets what, and why? This course will address basic questions about how politics shapes the nature of our economic existence. Is capitalism fair? Does it matter if it is? Is inflation really a bad thing? How does discrimination survive in a market economy?

Is US economic policy dictated by events in the East Coast or in East Asia? Through a consideration of alternate approaches, analytical devices, and practical problems, this course is designed to provide students with the means to evaluate the relatively simple but profoundly important forces that shape our daily lives.

**[GOVT 252 Contemporary Palestinian Society (also NES 298)]**

3 credits. Not offered 1998-99.  
See Near Eastern Studies 298 for description.]

**[GOVT 325 Eastern Europe]**  
4 credits. Not offered 1998-99.]

**GOVT 332 Modern European Politics**

Spring. 4 credits. D. Schirmer.  
The course gives an introduction to politics and political systems in Western Europe. It starts with a brief history of the formation of the nation state and the establishment of democratic rule. It continues with the modes and structures of political conflict and explores political cultures, party and electoral systems, the roles of interest groups and social movements, and the mass media. It then turns to a discussion of parliament and government. The main countries studied include Britain, France, Germany, and Italy. The main dimensions guiding the comparison will be conflict vs. consent, federalism vs. centralism, parliamentary vs. presidential systems, and majority vs. proportional representation. The course will conclude with a discussion of minority-majority relations and the problem of democratic inclusion.

**GOVT 333 Government and Politics of the Former Soviet Union**

Spring. 4 credits. V. Bunce.  
This course will present an overview of the transition from authoritarianism in post-Soviet Russia, with particular emphasis on distinguishing transitions from left-wing authoritarianism in Latin America, Southern Europe, and Asia. The course will cover: (a) The origins and role of perestroika and communist reformism in the post-Stalin era; (b) the systemic and individual factors which led to the crisis in the Communist Party and the collapse of the Soviet Union; (c) the institutional, ideological, and individual context of Russian politics in the post-coup era; (d) the problems of the development of a "civil society" in the post-communist context, with particular emphasis on the development of a multi-party system, finding new sources of social solidarity in a system still psychologically dependent on Leninist ideology, market reform in a collapsing command economy, and the particular problems of resurgent nationalism and state-building in the post-communist context.

**[GOVT 334 Political Economy of East Asia]**

4 credits. Not offered 1998-99.  
This lecture course examines East Asian political economy in historical and comparative perspective. Central questions include: Why have Japan, South Korea, and Taiwan developed so rapidly in the postwar era? Can we identify an East Asian mode of development? What does the region's growth mean for other countries and for the international economy? Are Southeast Asian countries following a similar trajectory today? Particular topics include Japanese colonialism, industrial policy and its critics, domestic political consequences of rapid growth, political



corruption, US-Japan economic conflict, and recent attempts at political-economic liberalization.]

**[GOVT 335 America in the World #**  
4 credits. Not offered 1998-99.]

**GOVT 336 Postcommunist Transitions**

Fall. 4 credits. B. Greskovits.  
This course will compare economic and political developments since the collapse of communism in Eastern Europe and the former Soviet Union. Primary emphasis will be placed on the relationship between democratization and the transition to capitalism, with some attention paid as well to nationalism and (for the new states in the region) state-building. Cases examined in greatest detail will vary by year, but will always be multiple such as to encourage comparative observations and generalizations.

**GOVT 340 Latin American Politics @**

Spring. 4 credits. H. Schamis.  
This is the introductory lecture course to the politics of Latin America. The main purpose is to view the region in a conceptual and comparative perspective. Country cases will be introduced in order to understand the fundamental historical processes as well as to explain the significance of competing theoretical frameworks that have shaped the debate in the field. The course will focus on the political economies of the region in order to analyze the role of groups and classes under different political regimes and contrasting strategies of development.

**GOVT 341 Modern European Society and Politics (also SOC 341)**

Fall. 4 credits. S. Tarrow.  
Since the French and industrial revolutions, modern Europe has served as the major source of innovation and stability, freedom and imperialism, war and peacemaking, capitalism and socialism, the rule of law and state terror, modernity and its critics. Even the 50-year long division of Europe by the Cold War could not destroy the continent's common, but contradictory heritage. This interdisciplinary core course in Modern European Studies will serve as an introduction to European society and politics. Topics include European identity and nationalism, cycles of revolution and reaction, stratification and mobility, law and violence, and war and peaceful alliances. The course will end with a historical introduction to the European Union. (May be taken separately, or in sequence with Government 342, The New Europe, which focuses on the EU.) Should the amount of qualified student demand permit it, a section will be organized in French.

**GOVT 342 United Germany in the New Europe**

Spring. 4 credits. P. Katzenstein.  
German unification in 1990 and the accelerating movement toward European integration have created new political conditions for our understanding of German and European politics. The end of the Cold War has brought forth old fears about the domination of Europe by an unpredictable German giant. Alternatively, these changes have also fueled new hopes for Germany and Europe as models of political pluralism in a more peaceful and prosperous world. This course will thus reflect on two kinds of politics: the specter of the "Germanization" of Europe and the vision of the "Europeanization" of Germany.

**Govt 343-345 State, Society, and Language in Ancient Egypt (also NES 368/369)**

343 fall, 345 spring. 4 credits each term.  
M. Bernal.

This course is concerned with state and society in Pharaonic Egypt 3400-300 BCE. This will be combined with an introduction to Middle Egyptian, the official language of the Middle Kingdom 2000-1750 BCE and accepted as the "classical" language thereafter. This is a two semester sequence course. In the fall semester (Govt 343) we shall study the Egyptian state and society through secondary materials; in the spring (Govt 345) we shall be reading primary sources concerned with everyday life, official reports and adventures abroad. (Students registering for Govt 345 must have completed Govt 343.)

**[GOVT 344 Government and Politics of Southeast Asia @**

4 credits. Not offered 1998-99.]

**[GOVT 346 Modern Japanese Politics @**

4 credits. Not offered 1998-99.]

**[GOVT 347 Government and Politics of China @**

4 credits. Not offered 1998-99.]

**[GOVT 349 Political Role of the Military**

4 credits. Not offered 1998-99.]

**[GOVT 350 Comparative Revolutions**

4 credits. Not offered 1998-99.]

**[GOVT 354 America in the World Economy**

4 credits. Not offered 1998-99.]

**[GOVT 355 International Relations of the Ancient Near East**

4 credits. Not offered 1998-99.]

**GOVT 356 Enlarging the New Europe: Labor, Business, and Politics (also ILRIC 337)**

Fall. 3 credits. E. Iankova.  
This advanced undergraduate seminar will examine the role of labor and business in the processes of European integration, with a special emphasis on processes of enlargement. We will examine the political involvement of labor and business in the four major waves of the European Union's enlargement: 1973—Britain, Denmark and Ireland; 1980s—Greece, Spain and Portugal; 1995—Austria, Finland and Sweden; and the accession negotiations with Estonia, Poland, Hungary, the Czech Republic, Slovenia and Cyprus, scheduled to begin in spring 1998. The seminar will explore how the European Union's enlargement is shaping social partnership at the Euro-level and domestically, among governments, employer associations and labor unions, that contribute importantly to the formulation of industrial and social policy in the European Union, the European Union's member countries, and in the formerly communist countries of central and eastern Europe.

**[GOVT 357 Understanding Russia Today**

4 credits. Not offered 1998-99.  
For description see, Russ L 330.]

**GOVT 358 Modern History of the Middle East: Changing Politics, Society, and Ideas @**

Fall. 4 credits. J. Rosenberg.  
For description, see NES 390.

**GOVT 415 Race, Gender, and Organization**

Spring. 4 credits. M. Katzenstein and J. Reppy.

Taking the military as our "case," we will explore how organizations confront diversity and how "difference" influences the way organizations function. We will consider competing accounts of the history of race desegregation comparing these theories with the course of gender integration and with the issue of gays and lesbians in the military. How does difference affect cohesion? In which ways are norms of masculinity integral to the tasks the military performs? The theoretical readings for the course will draw on the rich literature on militaries and civil society as well as on organizational culture including the newer critiques of organizational theory. Students who wish to write research papers on comparative cases outside the U. S. or on organizations other than the military will be encouraged to do so. Readings include works by Janowitz, Moskos, Nalty, Enloe, Schein, and the Segals, among others.

**[GOVT 430 Democracy, Power, and Economic Reform**

4 credits. Not offered 1998-99.]

**GOVT 431 Model European Union**

Spring. 2 credits. J. Pontusson.  
This two-credit course is designed to prepare students to participate in the annual Model European Union Simulation held, on an alternating basis, at SUNY Brockport and in Brussels. The simulation provides an opportunity for participants, representing politicians from the member states of the European Union, to discuss issues and resolutions of current concern to the EU. The preparatory course introduces students to the EU, the country that the Cornell team will represent, and the issues to be discussed at the simulation. A substantial part of travel costs for the Cornell team will be paid by the Institute for European Studies, and course enrollment will be restricted by budgetary considerations. Students enrolled in this course are required to write a research paper.

**GOVT 433 The Politics of Economic Liberalization in the Developing World @**

Fall. 4 credits. H. Schamis.  
What drives the current processes of economic liberalization taking place in most of the developing world? What kinds of constraints and opportunities do governments embarked upon such policy reforms face? What types of factors account for their success or failure? What is the relationship between the international dimension of this phenomenon and the domestic political conditions? This seminar addresses these questions by examining the interplay of domestic and international ideas, local and foreign actors, and national and transnational institutions which take part in these processes. The course focuses extensively on, but is not limited to, Latin America.

**[GOVT 434 Politics and Society in Modern Italy**

4 credits. Not offered 1998-99.]

**[GOVT 436 Environmental Politics and Policy**

4 credits. Not offered 1998-99.]

**[GOVT 437 Contemporary China: Society and Politics @**

4 credits. Not offered 1998-99.]

**[GOVT 438 Contemporary China: Political Economy @]**  
4 credits. Not offered 1998-99.]

**[GOVT 439 Japan in International Politics @]**  
4 credits. Not offered 1998-99.

The course focus is how Japan shapes and is shaped by the international environment, with particular emphasis on the post-cold war era. Our approach will be both thematic and institutional. Topics to be discussed include US-Japan trade friction, Japan's investment and ODA in Southeast Asia, and cultural politics and notions of a New Asian Identity.]

**[GOVT 440 The Political Economy of Market Reform (also GOVT 630)]**  
Spring. 4 credits. H. Schamis and B. Greskovits.

This seminar is open to advanced undergraduate and graduate students. It addresses the political economy of market reform in East-Central Europe and Latin America. Specifically, we will study the relatively fast collapse of state socialism versus the long decline of import-substituting industrialization, and their respective legacies upon new economic and political systems. We will focus on the role of major agents in the transformation process—the international system, coalitions of interest groups, political (especially state) institutions, and ideologies. Throughout the semester, we will examine the emerging market societies in the east and the south in comparative fashion.

**[GOVT 442 Feminist Politics and Policy in the United States and Europe (also GOVT 655)]**  
4 credits. Not offered 1998-99.]

**[GOVT 443 Proseminar in the Politics of South Asia @]**  
4 credits. Not offered 1998-99.]

**[GOVT 444 Afrocentrism]**  
4 credits. Not offered 1998-99.]

**[GOVT 445 Stalinism as Civilization]**  
Fall. 4 credits. P. Holquist.  
See History 478 for description.

**[GOVT 446 Social Welfare and International Competitiveness]**  
Spring. 4 credits. J. Pontusson.  
Intended for students with some background in comparative politics, this seminar explores differences among advanced industrial countries with respect to social welfare and the distribution of income and opportunity. Why is the welfare state so much more generous in some countries than in others, and what are the implications of these differences? Is there a trade-off between social equality and economic competitiveness? How does globalization affect the ability of national governments to provide for social welfare? The discussion will focus on the US and Western Europe.

**[GOVT 454 The Herodotean Moment: The Uses and Abuses of "Western Civilization" (also Comparative Literature 454, History 454) #]**  
4 credits. Not offered 1998-99.]

**[GOVT 458 Comparative Democratization]**  
4 credits. Not offered 1998-99.]

**[GOVT 468 Global and Domestic Dimensions of Science and Technology Policy (also S&TS 425)]**  
4 credits. Not offered 1998-99.]

## Political Theory

Government 161 is recommended.

**[GOVT 260 Social and Political Philosophy (also Philosophy 260)]**  
Fall. 4 credits. F. Neuhauser.  
See Philosophy 242 for description.

**[GOVT 361 Modern Ideologies: Liberalism and Its Critics #]**  
4 credits. Not offered 1998-99.]

**[GOVT 362 Politics of Sexuality (also Women's Studies 262)]**  
4 credits. Not offered 1998-99.]

**[GOVT 364 The Selfish Individual and the Modern World]**  
4 credits. Not offered 1998-99.]

**[GOVT 366 American Political Thought from Madison to Malcolm X (also History 316 and American Studies 366) #]**

Fall. 4 credits. I. Kramnick.  
A survey of American political thought from the eighteenth century to the present. Particular attention will be devoted to the persistence of liberal individualism in the American tradition. Politicians, pamphleteers and poets will provide the reading. The professor offers insightful historical and social context.

**[GOVT 368 Global Climate and Global Justice (also Philosophy 368)]**  
4 credits. Not offered 1998-99.]

**[GOVT 369 Introduction to Feminist Political Thought (also Women's Studies 269)]**  
4 credits. Not offered 1998-99.]

**[GOVT 370 Political Theory and Cinema]**  
4 credits. Not offered 1998-99.]

**[GOVT 375 Visual Culture and Social Theory (also ART H 370 and Comp. Lit. 368)]**  
4 credits. Not offered 1998-99.]

**[GOVT 377 Concepts of Race and Racism]**  
Spring. 4 credits. A. M. Smith.  
This course examines race and racism from a political theory perspective. We will discuss the different types of racism: traditional racism, "new racism," or cultural racism, scientific racism and contemporary hybrid racism. We will then examine the politically ambiguous "ethnicity theory." In the second half of the course, we will consider the works by Marable on African American political economy; women of color feminist theorists; native American theorists; Takaki on Asian American labor history; and Hero on Latinos/Latinas and American politics. Although we will discuss American multicultural history in some detail, our primary focus will be on an investigation of these works' theoretical foundations.

**[GOVT 461 Interpreting Race and Racism]**  
Fall. 4 credits. A. M. Smith.  
This seminar is an advanced undergraduate course based on classic and contemporary social and political theory texts. We will explore the historically specific and antagonistic construction of race, and we will focus on the complex and contradictory ways in which racializing formations are defined in terms of class, gender and sexuality. Our reading list will include Frantz Fanon, Stuart Hall, Hortense Spillers, Edward Said, Aijaz Ahmad,

Coco Fusco, Homi Bhabha, James Baldwin, Robin Kelley, Chandra Talpade Mohanty, Audre Lorde, Toni Morrison, David Roediger and Vron Ware. Seminar participants should have already completed Govt 377 and Govt 161 or equivalent courses in other departments before the course begins. Class size will be limited.

**[GOVT 462 Modern Political Philosophy]**  
Fall. 4 credits. R. Miller.  
For description, see PHIL 346.

**[GOVT 466 Feminism and Gender Discrimination]**  
4 credits. Not offered 1998-99.]

**[GOVT 467 Radical Democratic Feminisms]**  
4 credits. Not offered 1998-99.]

**[GOVT 468 Global and Domestic Dimensions of Science and Technology Policy]**  
4 credits. Not offered 1998-99.]

**[GOVT 469 Limiting War (also Phil 369)]**  
Spring. 4 credits. H. Shue.  
An examination of the ethical issues underlying choices about national and international security, concentrating on decisions about possession and use of specific types of weapons: weapons of mass destruction (nuclear, chemical, and biological), precision-guided munitions, and landmines. Should nuclear weapons be used to deter chemical and biological weapons, or does non-proliferation of the latter require abolition of the former? Can the distinction between combatants and non-combatants be maintained in an era of high-tech warfare? What, if anything, is special about landmines?

**[GOVT 473 Marx, Nietzsche, Freud (also German Studies 415)]**  
Spring. 4 credits. G. Waite.  
For description, see German Studies 415.

**[GOVT 474 Community, Nation, and Morality]**  
Spring. 4 credits. R. Miller.  
For description, see PHIL 446.

## International Relations

Government 181 is recommended.

**[GOVT 294 Global Thinking (also Philosophy 294) @]**  
Spring. 4 credits. No prerequisites; intended for freshmen and sophomores. Fulfills geographical distribution requirement. H. Shue.

The analysis taught in this course is global in two different respects: international subjects and interdisciplinary methods. We look in detail at questions raised by one of the most important and most difficult issues facing international society: when, if ever, should other nations unilaterally or multilaterally intervene militarily into ethnic conflicts like those in Bosnia and Rwanda in this decade? Both of these recent cases, one in Europe and one in Africa, raise fundamental questions about the kind of world we are constructing for the 21st century. To what extent is the system of nation-states we now have either desirable or unavoidable? Does every ethnic group have a right to a self-determining and sovereign state? When is the use of military force morally justified? Should trials for war crimes or crimes against humanity be routinely held after military conflicts? These

and other ethical questions need to be answered in light of the best available knowledge about the political dynamics of foreign interventions and the changing international legal regime, bringing together political science, law, and ethics. The course is team-taught by leading faculty researchers from the three fields listed.

**GOVT 380 The Politics of Modern Germany**

Fall. 4 credits. D. Schirmer.  
"Learning from History" in the sense of "learning from failure" is one of the basic modes of political modernization. Thus, structures and functioning of German postwar politics are inseparably tied to interpreting the causes of the political instability of the Weimar Republic and the rise of Nazism. Therefore, the course will employ the interpretation of history as a general framework for the introduction into German politics. Topics will include the constitutional concept of the Grundgesetz (basic law), the political culture, the electoral and party systems, parliament and government, interest groups and Germany's liberal corporatism, and the federal system. We will also try to evaluate to which degree German politics have been transformed by the process of unification.

**[GOVT 382 International Relations of East Asia @**  
4 credits. Not offered 1998-99.]

**[GOVT 383 Theories of International Relations**  
4 credits. Not offered 1998-99.]

**GOVT 385 American Foreign Policy**  
Spring. 4 credits. R. McDermott.

This course will provide an overview of the history of American foreign policy, concentrating on the period between 1914 and the present. Various theoretical approaches to the study of American foreign policy will be covered, including international, domestic and individual levels of analysis. These interpretations will be used to examine events including: the First World War and the League of Nations; the rise of American hegemony; various crises of the Cold War, including the U-2 crisis, the Suez and Berlin crises, and the Cuban missile crisis; and the Korean, Vietnamese and Gulf Wars. Emphasis will be placed on security as opposed to economic foreign policy issues.

**GOVT 386 The Causes of War**  
Spring. 4 credits. C. Way.

Review of the theoretical literature on the causes of war and sources of peace. Application of theories to case studies of specific wars and consideration of different proposals for preventing war. Topics include contrasting explanations for the origins of World War I and II; the democratic peace; and the prospects for military conflict in the post-Cold War era.

**GOVT 387 Political Psychology in International Relations**

Fall. 4 credits. R. McDermott.  
This course provides a survey of how social and cognitive psychology are used in the study of international relations. This course will cover various methodologies, including psychobiography and experimental and survey research. It will also cover several theoretical approaches, including recent work in neuroscience and evolutionary psychology. These theories and methods will be applied to topics including risk taking, leadership, group

dynamics, and the influence strategies of the media. Particular attention will be placed on the interaction of emotion, cognition and behavior in processes of judgment and decision making.

**[GOVT 388 International Political Economy**  
4 credits. Not offered 1998-99.]

**GOVT 389 International Law**

Fall. 4 credits. J. Rabkin.  
Is international law a pious delusion, helpless in the face of real power? Or is public policy becoming so entangled in international standards that international law is now eroding national sovereignty? This course will survey the theoretical foundations and general history of international law since the 17th century to highlight what is new in the doctrines and institutions by which it operates in the contemporary world. The course will give special attention to the relation between international and U.S. law and to the workings of international law in particular fields—including environmental and human rights protection, trade regulation and control of terrorism.

**[GOVT 391 Chinese Foreign Policy @**  
4 credits. Not offered 1998-99.]

**[GOVT 392 International Relations of the Middle East (also NES 395) @**  
4 credits. Not offered 1998-99.]

**[GOVT 393 Introduction to Peace Studies (also SOC 393)**  
4 credits. Not offered 1998-99.]

**[GOVT 394 Comparative Foreign Policy**  
4 credits. Not offered 1998-99.]

**[GOVT 395 Palestinian Nationalism (also NES 399)**  
4 credits. Not offered 1998-99.]

**[GOVT 475 The Politics of International Monetary and Financial Relations**  
4 credits. Not offered 1998-99.]

**[GOVT 477 Rational Choice Approaches to International Relations**  
4 credits. Not offered 1998-99.]

**[GOVT 482 International Relations of East Asia @**  
4 credits. Not offered 1998-99.]

**GOVT 483 The Military and New Technology (also S&TS 483)**  
Fall. 4 credits. J. Reppy.

In conventional wisdom, military organizations are seen paradoxically both as inflexible institutions and as proponents and consumers of rapid technological change. In this seminar we will examine changes over time in the attitude of the military toward new technology and analyze competing explanations for these changes. Readings will include Michael Howard, *War and European History*; John Ellis, *The Social History of the Machine Gun*; and Donald MacKenzie, *Inventing Accuracy: An Historical Sociology of Nuclear Missile Guidance*.

**[GOVT 489 International Law and Regime Development**  
4 credits. Not offered 1998-99.]

**[GOVT 491 Conflict, Cooperation, and Norm: Ethical Issues in International Affairs**  
4 credits. Not offered 1998-99.]

## Honors Courses

Late each spring a limited number of sophomore majors are admitted to the honors program, their work to begin the following fall. Application forms and a full description of the program may be obtained in 125 McGraw Hall.

**GOVT 493 Studying Politics: The Junior Honors Seminar**

Fall and spring. 4 credits. Fall: S. Tarrow, spring: R. Bensel.  
The seminar will meet twice weekly under the supervision of a senior faculty member with numerous classes being led by other members of the department faculty. The seminar will survey the broad range of what we mean by "the study of politics" and the various methods we enlist to carry out the study. The seminar will be writing intensive, requiring probably at least five papers.

**GOVT 494 Honors Seminar: Thesis Clarification and Research**

Fall. 4 credits. E. Sanders.  
Each student works individually with a faculty member. The student initiates the tutorial by interesting a faculty member in his or her likely thesis project and by submitting to the director of undergraduate studies a form outlining the general area the thesis will treat and bearing the faculty tutor's signature. This form is due the third week of classes. The tutorial culminates in a ten-to-fifteen-page paper setting forth the central questions to be addressed by the thesis, the state of existing knowledge regarding those questions, and why they matter.

**GOVT 495 Honors Thesis: Research and Writing**

Spring. 4 credits. Limited to students who have successfully completed Government 494.

Students continue the work of the preceding semester typically with the same faculty tutor. Research on the thesis is completed and writing begun. The tutorial culminates in a thesis of some sixty to eighty pages. The grade for the tutorial is determined by the faculty tutor, while the degree of honors (if any) awarded the thesis is decided by a committee of faculty members established for that purpose.

## Independent Study

Independent study, Government 499, is a one-on-one tutorial which is arranged by the student with a faculty member of their choosing. Government 499 is open to government majors doing superior work, and it is the responsibility of the student to establish the research proposal and to find a faculty sponsor. Applicants for independent study must present a well-defined program of study that cannot be satisfied by pursuing courses in the regularly scheduled curriculum. No more than 4 credits of independent study may count toward fulfillment of the major. Students who elect to continue taking this course for more than one semester must select a new theme or subject each semester. Credit can be given only for work that results in a satisfactory amount of writing. Emphasis is on the capacity to subject a body of related readings to analysis and criticism. Keep in mind that independent study cannot be used to fulfill the seminar requirement. The

application form for Independent Study is available in 125 McGraw Hall and must be completed at the beginning of the semester in which the course is being taken.

**GOVT 499 Readings Fall or spring.**  
Fall or spring. 1-4 credits.

## Graduate Seminars

Qualified undergraduates are encouraged to apply for seminars listed with 600 course numbers but may only register with the permission of the instructor. Students may consult the supplement that lists graduate courses, available in the department office.

## Field Seminars

### GOVT 603 Field Seminar in American Politics

Spring. 4 credits. M. Shefter and J. Rabkin.

The basic issues and institutions of American government and the various subfields of American politics are introduced. The focus is on substantive information and theoretical analysis and problems of teaching and research.

### GOVT 606 Field Seminar in International Relations

Spring. 4 credits. P. Katzenstein and R. McDermott.

A general survey of the literature and propositions of the international relations field. Criteria are developed for judging theoretical propositions and are applied to the major findings. Participants will be expected to do extensive reading in the literature as well as research.

### GOVT 607 The Western Political Tradition: A Survey

Fall. 4 credits. B. Jacobs.

An introduction to political theory through a reading of selected classics in political thought from Plato to Marx.

## Methodology

### GOVT 601 Scope & Methods of Political Analysis

Fall. 4 credits. W. Mebane.

This course introduces the major analytical approaches used in contemporary political science research. We touch on broad philosophical issues concerning the nature of theory and inference, the practices of cultural and historical interpretation, and the relevance of moral values and political commitments. Several kinds of research designs, including comparative case study and quasi-experimentation, are briefly examined. The basic analytical ideas involved in statistical methods such as sampling and regression analysis are introduced, as are the basic concepts of the theory of collective choice and the elementary methods of applied game theory.

### GOVT 602 Field Seminar in Political Methodology

Spring. 4 credits. J. Cowden.

This course provides an introduction to some of the quantitative methods used in the social sciences. Topics we shall discuss include: elementary probability theory, random variables, functions of random variables, and sampling distributions; concepts of inference, including point estimation, confidence intervals, and hypothesis testing; bivariate regression; and multiple regression.

### GOVT 605 Comparative Methods

Spring. 4 credits. J. Pontusson.

This seminar provides a survey of different methodological approaches to the study of comparative politics: single case studies, comparative case studies based on Millian logic, qualitative comparative analysis, and a variety of quantitative methods. Substantive works will be used to illustrate each approach. Throughout, the discussion will emphasize methodological issues that are common to all forms of comparative inquiry.

### GOVT 608 Normative and Interpretive Methodologies

Spring. 4 credits. A. M. Smith and staff.

This course will present various normative and interpretive methodological approaches to issues in political science. Though the specific focus of the course will vary depending on the interests of the instructor, the general orientation of the seminar will be to expose students to the role of hermeneutic techniques and qualitative criticism in political analysis. This course will fulfill departmental requirements for the second methodology course.

### [GOVT 610 Formal Theory and Modelling

4 credits. Not offered 1998-99.]

### GOVT 707 Game Theory for Political Science

Spring. 4 credits. C. Way.

Introduction to game theoretic models of politics. Lays out the logical basis of game theory at an accessible level, and demonstrates applications to topics in comparative politics, international relations, and American politics. Students will achieve an understanding of the basic concepts of game theory, the ability to solve and to formulate simple games, and some knowledge of the basic models used in political science.

## American Government and Institutions

### [GOVT 609 Political Parties and Elections

4 credits. Not offered 1998-99.]

### [GOVT 611 The Political Economy of American Development, 1860-1900

4 credits. Not offered 1998-99.]

### [GOVT 612 American Political Development II: Social Movements and State Expansion in the Twentieth Century

4 credits. Not offered 1998-99.]

### [GOVT 613/413 Finance, Federalism, and Politics

4 credits. Not offered 1998-99.]

### [GOVT 615 State and Economy in Comparative Perspective

4 credits. Not offered 1998-99.]

### [GOVT 618 Politics, Markets, and the Middle Classes

4 credits. Not offered 1998-99.]

### GOVT 620 The United States Congress

Spring. 4 credits. R. Bensel and W. Mebane.

The United States Congress will be examined: first, as a "closed system" in which institutional arrangements decisively apportion political power; and, second, as the product of electoral and social forces outside the institution. Emphasis will be placed on the historical relationship between institutional growth and state formation, parliamentary rules as both arrangements within which the

"rational choices" of legislators are played out and as deliberate, constructions and allocations of political influence, and the use of legislative behavior as evidence in the analysis of fundamental principles of politics. Because the literature on the lower chamber is generally more rich, the House of Representatives will receive greater attention than the Senate.

### [GOVT 623 The Politics of Courts

4 credits. Not offered 1998-99.]

### GOVT 628 Bureaucracy and Law

Fall. 4 credits. J. Rabkin.

Traditionally, Americans have feared "bureaucracy" as the enemy of "law," while Europeans have respected orderly administration as the best guarantee of legality. Yet today even Americans tend to scorn "lawyers" and admire "managers" and the federal court system boasts of its improvements in case-flow and system "management." Are we finally growing up or just getting more confused? This course offers an overview of classic political theories that still frame debates about bureaucracy and law. It will also survey relevant U.S. legal doctrines and practices in comparative perspective. It will conclude with some speculation on why U.S. practices in this area are being copied in other countries—while generating continuing dispute in the U.S.

### [GOVT 629 Cleavages and Coalitions in Contemporary American Politics

4 credits. Not offered 1998-99.]

### GOVT 703 Political Economy

Fall. 4 credits. R. Bensel and J. Kirshner.

This course will undertake a general survey of the classical and modern theories of political economy. The works of Smith, List, Marx, Weber, Keynes, Shumpeter, Hayek, and Friedman, among others, will be studied and placed within the context of the history and evolution of the thought, practice, and method of the field.

### GOVT 705/405 Government and the Economy

Fall. 4 credits. E. W. Kelley.  
See GOVT 405 for description.

### GOVT 706 The Politics of Education

Spring. 4 credits. E. W. Kelley.  
See GOVT 406 for description.

## Comparative Government

### GOVT 630 The Political Economy of Market Reform

Spring. 4 credits. H. Schamis and B. Greskovits.

This seminar is open to advanced undergraduate and graduate students. It addresses the political economy of market reform in East-Central Europe and Latin America. Specifically, we will study the relatively fast collapse of state socialism versus the long decline of import-substituting industrialization, and their respective legacies upon new economic and political systems. We will focus on the role of major agents in the transformation process—the international system, coalitions of interest groups, political (especially state) institutions, and ideologies. Throughout the semester, we will examine the emerging market societies in the east and the south in comparative fashion.

### GOVT 632 Politics and Society in Western Europe

Spring. 4 credits. D. Schirmer.



The cause for the return of civil society in Western European political discourse is twofold. First, it is a consequence of the almost utopian character this once sober concept acquired when it was adopted by the Eastern European civic movements in the final days of the state socialist regimes. Second, it responds to the crisis of the European welfare state. Both account for a renewal of a republicanism that draws philosophically on Hannah Arendt's idea of the constitution of freedom and historically on the French and American revolutions as examples of the self-constituting power of collective action, thus putting the civil society at the center of a theory of democracy. The course will evaluate current civil society discourses in Western Europe with respect to underlying concepts of republicanism and democracy. It will use American and Eastern European civil society discourses as a backdrop and, thus, reconstruct the modifications the concept underwent while traveling back and forth between Western Europe, the United States, and Eastern Europe.

**[GOVT 633 European Party Systems and Political Change]**

4 credits. Not offered 1998–99.]

**[GOVT 634 Genetic Engineering: Politics and Society in Comparative Perspective]**

Spring. 4 credits. S. Hilgartner.  
See S&TS 645 for description.

**[GOVT 638 Latin American Political Economy]**

4 credits. Not offered 1998–99.]

**[GOVT 639 Studying Political Culture]**

4 credits. Not offered 1998–99.]

**[GOVT 642 Comparative Political Economy: East and Southeast Asia]**

4 credits. Not offered 1998–99.]

**[GOVT 645 Chinese Politics]**

4 credits. Not offered 1998–99.]

**[GOVT 648 Political Economy of Change: Rural Development in the Third World]**

4 credits. Not offered 1998–99.]

**[GOVT 652 Southeast Asia Seminar: The Philippines (also Asian Studies 601)]**

Fall. 4 credits. B. Anderson.  
The reading seminar will focus on the major scholarly works dealing with the modern social history, politics, cultures, and economic problems of the twice-colonized Philippines. The framework will be provided by theories of colonialism, nationalism, and decolonization, and by comparisons with other parts of Southeast Asia and Latin America.

**[GOVT 653 The Plural Society Revisited (also Asian Studies 602 and 607)]**

4 credits. Not offered 1998–99.]

**[GOVT 655 Gender, Politics and Welfare Policies in Europe and the U.S. (also GOVT 442)]**

4 credits. Not offered 1998–99.]

**[GOVT 656 Comparative Political Economy]**

Fall. 4 credits. J. Pontusson and C. Way.  
While exploring selected topics in the comparative political economy of advanced industrial societies, this seminar seeks to delineate "political economy" as a subfield of political science. At the level of theory, our goal is to bridge two research traditions, one

concerned with micro-economic issues (industrial organization, industrial policy, competitiveness) and the other concerned with macro-economic issues (wage bargaining, fiscal and monetary policy), and to explore what a synthesis of these research traditions might look like. At the level of methodology, we seek to bridge and integrate qualitative and quantitative approaches to comparative political economy. Students are expected to have some prior exposure to quantitative analysis (e.g., Government 601).

**[GOVT 657 Comparative Democratization]**

4 credits. Not offered 1998–99.]

**[GOVT 660 Social Movements and Contentious Politics (also SOC 660)]**

Spring. 4 credits. S. Tarrow.

This is a research seminar on the relationships among politics, organized social movements, and periods of mass mobilization like those that swept through Western Europe and the U.S. in the 1960s and in Eastern and Central Europe today. The course begins with a theoretical introduction to major approaches to social movements and collective action, concentrating on the factors that induce masses of people to adopt disruptive forms of collective action. It moves from there to a historical section focusing on cycles of protest in the recent and not-so-recent past. It continues with case materials that illustrate a series of theoretical problems in the study of movements and collective action—particularly that of the relations between protest and reform. Students will write term papers on particular cycles of protest and reform.

**[GOVT 692 The Administration of Agricultural and Rural Development]**

Spring. 4 credits. N. Uphoff.  
For description, see INTAG 603.

**Political Theory**

**[GOVT 663 Political Theories of Power]**

4 credits. Not offered 1998–99.]

**[GOVT 664 Contemporary Democratic Theory]**

4 credits. Not offered 1998–99.]

**[GOVT 665 American Political Thought: From Madison to Malcolm X]**

Fall. 4 credits. I. Kramnick.  
This seminar will trace developments and tendencies in American political thought from the Eighteenth Century to the present. It will examine individual thinkers, like Jefferson, Calhoun or Dewey, movements like Anti-Federalism, Social Darwinism and Progressivism, and themes of political culture like racism, sexism, class policies, and religion. The seminar will presume a basic familiarity with American history.

**[GOVT 669 Modern Social Theory I]**

4 credits. Not offered 1998–99.]

**[GOVT 670 Modern Social Theory II]**

4 credits. Not offered 1998–99.]

**[GOVT 671 Graduate Seminar in Feminist Political Theory]**

4 credits. Not offered 1998–99.]

**[GOVT 674 Theory and Practice of Nationalism]**

Fall. 4 credits. B. Anderson.  
This course will be devoted to the comparative study of the rise and transformation of nationalism, according to different theoretical

and philosophical traditions. The relationship of nationalism to questions of race, gender, class, and time will also be discussed on the basis of both theoretical and empirical studies.

**[GOVT 675 Gramsci and Cultural Politics (also German Literature 685)]**

4 credits. Not offered 1998–99.]

**[GOVT 676 Theories of Governmentality]**

Fall. 4 credits. A. M. Smith.

An advanced social and political theory seminar for graduate students that focuses on Foucauldian and post-structuralist theories of regulation and social control. Featured theorists will include Michel Foucault, Jacques Donzelot, Judith Butler, Ernesto Laclau, Mike Davis, Thomas Dumm, Bob Jessop, Nikolas Rose, Colin Gordon and Elaine Scarry. Seminar participants should have acquired a substantial background in the political theory tradition, and should have completed Government 663 or an equivalent course in other departments, before taking this course.

**[GOVT 678 Classics in Political Thought: Adam Smith and David Hume]**

Fall. 4 credits. J. Lomonaco.

Using Habermas' work on the public sphere and Foucault's work on governmentality as initial orientation points, the course examines the full range of Hume and Smith's work as fundamentally addressed to a political problem: the government of conduct, both individual and collective, in civil society. To a perhaps unprecedented degree, civil society presented itself to Hume and Smith as not underwritten by any providential guarantor; consequently, how social and political order emerged out of nothing more than the conduct and interaction of individuals on the immanent plane of civil society became an issue of the first theoretical and practical importance. This task was all the more urgent because, for Hume and Smith, individuals were irreducibly prone to opinions, passions, delusions, superstitions and antinomian claims of inspiration that could lead to the kinds of devastating conflicts that had bedeviled the seventeenth century and that threatened to return in the eighteenth. These two foremost thinkers of what is now called the Scottish Enlightenment will be studied in relation both to their contemporary scene and to long-term discursive traditions like reason of state, modern natural jurisprudence, and the ideology of politeness.

**[GOVT 679 Althusser and Lacan]**

Spring. 4 credits. G. Waite.  
See German Studies 686 for description.

**International Relations**

**[GOVT 681 Politics of Transnationalism]**

Spring. 4 credits. S. Tarrow.  
With the globalization of the world economy and media and the diffusion of new international organizations and institutions, economists, political scientists and sociologists have been asking whether the monopoly of the nation-state over international society is eroding. Such erosion could be part of the explanations for the mobility of capital and employment, the diffusion of transnational movements, and for the apparent inability of states to control identity politics within and contagion from without. The central questions of this course are whether something resembling a transnational society is developing and what are the effects of transnational movements on the state.

**[GOVT 682 International Relations of the Middle East]**

4 credits. Not offered 1998-99.]

**[GOVT 683 Foreign Policy Analysis]**

4 credits. Not offered 1998-99.]

**GOVT 685 International Political Economy**

Spring. 4 credits. J. Kirshner.

An exploration into a range of contemporary theories and research topics in the field of international political economy. The seminar will cover different theoretical perspectives and a number of substantive problems.

**[GOVT 686 International Strategy]**

4 credits. Not offered 1998-99.]

**[GOVT 687 International Environmental Policy]**

Not offered 1998-99.]

**GOVT 688 Political Economy and National Security**

Fall. 4 credits. J. Kirshner.

This seminar considers the relationship between economics and national security. Specific topics will change from year to year, but will typically include the following: the economic foundations of power, economic coercion, the economic roots of conflict, and the ways in which structural changes in the international economy shape and limit state authority.

**GOVT 689 International Security Politics**

Fall. 4 credits. R. McDermott.

This course will provide an overview of theoretical and research topics in the area of international security policy. This course will cover several theoretical perspectives, including rational choice and psychological approaches to the study of security issues. These perspectives will be used to examine various substantive topics including war and deterrence, balance of power, alliance politics, domestic constraints on foreign policy and military strategy. Less attention will be paid to issues involving economic cooperation and sanctions.

**[GOVT 691 Normative Elements of International Relations]**

4 credits. Not offered 1998-99.]

**[GOVT 694 Research Design and Grant Writing]**

4 credits. Not offered 1998-99.]

**Independent Study**

This course is *NOT* open to undergraduates. Undergraduates wishing to conduct supervised study should register for Government 499.

**GOVT 799 Independent Study**

Fall or spring. 4 credits.

Government 799 is a course of individualized readings and research for graduate students. Topics, readings, and writing requirements will be designed through consultation between the student and the instructor. Graduate students in government who are looking to use this as an option to fulfill their course requirements should check with their chairs to be certain that the program of study is acceptable for this purpose. Applications must be completed and signed by the instructor and by the chairs of their special committees. They are available from, and must be returned to, the graduate assistant in 125 McGraw Hall.

**GREEK**

See under Department of Classics.

**HEBREW**

See under Department of Near Eastern Studies.

**HINDI-URDU**

See Languages Courses under Languages and Linguistics.

**HISTORY**

I. Hull, chair; M. Steinberg, director of graduate studies; T. Borstelmann, director of undergraduate studies; S. Blumin, V. Caron, S. Cochran, P. R. Dear, M. C. Garcia, S. Greene, P. Holquist, P. R. Hyams, J. J. John, C. Kammen, M. Kammen, S. L. Kaplan, J. V. Koschmann, D. C. LaCapra, W. F. LaFeber, R. L. Moore, J. M. Najemy, M. B. Norton, G. Okihiro, C. Peterson, J. R. Piggott, S. Pohl, R. Polenber, W. B. Provine, T. Shiraishi, J. H. Silbey, B. Strauss, D. Usner, M. Washington, R. Weil, J. H. Weiss, D. Wyatt

Emeritus: D. A. Baugh, K. Biggerstaff, P. W. Gates, W. M. Pintner, F. Somkin, B. Tierney, O. W. Wolters

The popularity of history among Cornell students is due to its usefulness as preparation for graduate, professional, or law school and for any career that requires critical thinking and good writing; the reputation of the faculty for scholarship, teaching, and advising; and most of all, the intrinsic interest of the discipline. A wide variety of introductory and advanced courses is offered. The department is particularly strong in ancient, medieval, and modern European history; in American, Latin American, and Asian history; and in the history of science.

**The Major**

To complete the history major, a student must fulfill the requirements listed below:

Entry requirement: completion of *any* two History courses excluding Freshman Writing Seminars.

- 1) Take 9 history department courses (for either 3 or 4 credits each), completing all of them with a grade of C or better. (Courses taken for entry may count towards fulfilling the major.)
- 2) Of the total 9 courses:
  - a) 4 must be outside of American history and
  - b) 3 must be in history before 1800.

Courses used to fulfill Requirement (1) above may also be used to fulfill Requirement (2), in respect both to (a) and (b) if applicable. A course in American history before 1800 may be used to fulfill Requirement (2b). A course before 1800 in a field other than American history can be used toward fulfillment of both Requirements (2a) and (2b).

- 3) Of the total 9 courses, one must be a 400-level seminar. History 400 may be used to fulfill this requirement. Appropriate 400-level seminars may be used to fulfill Requirements (2a) and (2b).

**Honors**

The history department offers an honors program for students who wish to research and write a thesis during their senior year. In addition to writing the thesis, honors students must maintain a 3.5 average in their history courses, take the Honors Proseminar (History 400) plus an additional 400-level seminar, preferably during their junior year, and complete 10 courses in history (for 3 or 4 credits each). During the second term of sophomore year or early in junior year, interested students should speak to a faculty member or faculty adviser about the honors program.

Before the beginning of senior year, the candidate presents in conversation or in writing a thesis proposal to an appropriate member of the faculty. The faculty member who approves the proposal ordinarily becomes the thesis supervisor. If for any reason it is necessary to change supervisors, this arrangement should be confirmed no later than the fourth week after the beginning of the candidate's senior year.

Honors candidates should register in History 401, Honors Research, with their supervisors. Any exceptions to this must be approved by the Honors Committee. History 401 is a 4-credit course that permits honors candidates to conduct research and to begin writing the honors essay. At the end of the first semester of the senior year, as part of the requirements for History 401, the student submits to the supervisor a ten-to-fifteen page overview, or, alternatively, a preliminary draft of some part of the thesis along with an outline of the whole and meets with a committee consisting of the student's supervisor and one other department member who will eventually serve as a reader of the thesis. That committee then recommends whether the student may proceed to enroll in History 402, Honors Thesis, during the final semester of the senior year. History 402 is a 4-credit course that permits honors candidates to complete the honors essay and to demonstrate their understanding of the ways in which the themes explored in the thesis fit into a larger historical context.

The completed thesis is evaluated by three readers, including the two faculty members who administered the preliminary oral interview in December.

The text of the honors essay may not exceed sixty pages except by permission of the chair of the honors committee and the student's supervisor. Two copies are due during the third or fourth week of April. In May each honors candidate is given an oral examination administered by the supervisor; examination focuses on the essay as well as the specific subfield of history in which the student has conducted research (e.g., Periclean Athens, seventeenth-century science, nineteenth-century America).

To qualify for a bachelor of arts degree with honors in history, a student must (1) sustain at least a 3.5 cumulative average in all history courses and (2) earn at least a cum laude grade on the honors essay and on the oral examination.

**Cornell-in-Washington Program.** History majors may apply to the Cornell-in-Washington program to take courses and undertake a closely supervised externship during a fall or spring semester.

## Course Offerings

Comparative history

History of science

American history

Latin American history

African history

Asian history

Near Eastern history

Ancient European history

Medieval, Renaissance, and early modern European history

Modern European history

Honors and research courses

## Course Numbering System

100-level courses are very general introductory courses (like 151-152, 190-191) and freshman writing seminars.

200-level courses come in two kinds: seminars or lecture courses. Neither kind has prerequisites and both admit freshmen. 200-level seminars (which are identified by the name "seminar" in the title) are similar to freshman writing seminars, except that there is greater emphasis on subject matter and less on writing.

200-level lecture courses cover a relatively broad geographical area, period of time, or subject.

300-399-level courses may have specified prerequisites or deal with more-specialized subjects than do those numbered 250-299. Admission of freshmen varies from course to course and is indicated in the course descriptions.

400-499 are upper level undergraduate courses.

600-699 and 700-799 are graduate level courses.

## Comparative History

### HIST 274 Foodways: A Social History of Food and Eating #

Spring. 4 credits. S. L. Kaplan. An interdisciplinary examination of the validity of the adage "man is what he eats." Among the topics: food and nutrition, food and social structure, the politics of food control, food and modernization, taste making, and food in religion and literature. Cases will be drawn widely across space and time, from Pharaoh's Egypt to the 1990s.

### HIST 360 Early Warfare, East and West #

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. C. Peterson. A study of the principal modes of warfare found both in the East and the West from ancient times up to the eighteenth century. Tactical evolution and the impact of innovations are stressed, but attention is also paid to the general social and cultural background and the role of nonmilitary factors.]

### [HIST 380 Social History of Western Technology #

4 credits. Not offered 1998-99. J. Weiss. For description, see History of Science.]

### [HIST 393 Images of Humanity in Medieval China (also Asian Studies 393) @ #

Fall. 4 credits. Prerequisite: any course on premodern China or Chinese religions, or permission. Not offered 1998-99. C. Peterson.]

### [HIST 405 Population and History #

4 credits. Open to sophomores. Not offered 1998-99. S. L. Kaplan.]

### HIST 409 Seminar on Work in Europe and America #

Fall. 4 credits. Prerequisite: permission of instructor. S. L. Kaplan.

A comparative study of the meaning of work in different societies from premodern times to the present. Emphasis on the "representations" of work of the actors themselves who worked, as well as of those who for various critical reasons did not work. The seminar will examine not only ideology but also the organization, practice, and physical place of work. It will explore theory as well as "cases," and draw on anthropological and sociological as well as historical materials.

### [HIST 432 The City in History: Europe and America #

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. S. Blumin.

Reading and discussion of significant interpretations of the rise, role, and character of cities in medieval and early modern Europe and in modern Europe and America. Individual research projects.]

### [HIST 451 Lord and Peasant in Europe: A Seminar in Social History #

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. S. L. Kaplan.]

### [HIST 454 The Herodotean Moment: The Uses and Abuses of "Western Civilization" (also Government 454) #

Fall. 4 credits. Limited to 20 students. Prerequisite: permission of instructor. Not offered 1998-99. J. Najemy, M. Bernal.

The basic premise of the seminar is that the concept of "Western civilization" is a problematic one in need of critical and historical analysis. The course will examine the evolution and transformation of this concept from antiquity to the twentieth century by focusing on selected moments (and texts in which they are represented) of actual and/or perceptual encounters with other civilizations. It will also inquire into the political uses and abuses of the idea of the West, and the literary, psychological, and anthropological dimensions of the idea's history. Readings include selections from Herodotus's *Histories*, Virgil's *Aeneid*, Augustine's *City of God*, *The Song of Roland*, Petrarch, Pico, Machiavelli, Montesquieu, Flaubert, Shelley's *Hellas*, Arnold, Hegel's *Philosophy of History*, James Mill's *History of British India*, and, from secondary critical literature, Tzvetan Todorov's *The Conquest of America* and Edward Said's *Orientalism*.]

## History of Science

### HIST 250 Technology in Society (also Engineering General Interest 250, Electrical Engineering 250, and Science and Technology Studies 250)

Fall. 3 credits. R. Kline. For description, see ENGRG 250.

### [HIST 281 Science in Western Civilization (also Science and Technology Studies 281) #

Fall. 4 credits. History 281 is not a prerequisite to 282. Not offered 1998-99. P. R. Dear.

This course aims to make comprehensible both to science majors and to students of the humanities the historical structure and development of modern science and to show science as a cultural phenomenon. Changing perceptions of nature and human knowledge from Greek Antiquity to the twentieth century form the framework for current Western views of the world, while the roots of the present-day dominance of "science" as a symbol of progress and modernity lie in an alliance between knowledge of nature and power over nature that took shape in the nineteenth century after a long period of emergence. 281 runs chronologically up to the death of Isaac Newton and focuses on the cultural traditions of Christian Europe and its selective appropriation of a Greek heritage.]

### HIST 282 Science in Western Civilization (also Science and Technology Studies 282) #

Spring. 4 credits. History 281 is not a prerequisite to 282. P. R. Dear.

This course aims to make comprehensible both to science majors and to students of the humanities the historical structure and development of modern science and to show sciences as a cultural phenomenon. Changing perceptions of nature and human knowledge from Greek Antiquity to the twentieth century form the framework for current Western views of the world, while the roots of the present-day dominance of "science" as a symbol of progress and modernity lie in an alliance between knowledge of nature and power over nature that took shape in the nineteenth century after a long period of emergence. This course covers the eighteenth, nineteenth, and early twentieth centuries.

### [HIST 287 Evolution (also Biology-General Courses 207; Science and Technology Studies 287)

Fall. 3 credits. Not offered 1998-99. W. Provine.

For description, see BIO G 207.]

### HIST 292 Inventing the Power and Information Societies (also Engineering General Interest 298, Electrical Engineering 298, and Science and Technology Studies 292)

Spring. 3 credits. R. Kline. For description, see ENGRG 298.

### [HIST 380 Social History of Western Technology #

Spring. 4 credits. Not offered 1998-99. J. Weiss.

Studies in the interaction between technological changes and social changes in Western Europe and America since the eighteenth century. Readings and lectures will deal both with instances of social transformation that

accompanied technological changes and with the role of technology in social thought and cultural expression. Special attention to three periods: Britain during the Industrial Revolution, America in the nineteenth century, and America during the Vietnam War.]

**HIST 415 Seminar in the History of Biology (also Biology-General Courses 467, Biology and Society 447; Science and Technology Studies 447)**

Summer. 4 credits. W. Provine.  
Specific topic changes each year.

**HIST 416 Enlightened Science (also Science and Technology Studies 416)**

Spring. 4 credits. P. R. Dear and M. A. Dennis.

"Science" is a term that is often associated with "rationality." The idea that "reason," rather than "faith" or "tradition" should be the pre-eminent guide to practical action has deep roots in the thought of 18th-century Europe, the period known as the Enlightenment. The practice and image of science in the Enlightenment show how this ideal was developed and understood, and what its meanings and implications were. Those meanings, and their associated values, remain strongly with us today. This course will investigate our current scholarly understanding of many themes and issues relating to "enlightened science," as well as studying writings of the period itself in a variety of topical areas, from political economy to astronomy and natural history, in several national contexts including Scotland, France, and Germany. We will attempt to view these materials from the perspective both of developments from earlier periods and in relation to the later consequences of this ideology.

**HIST 525 Seminar in the History of Technology (also Science and Technology Studies 525)**

Fall. 4 credits. R. Kline.  
For description, see S&TS 525.

**[HIST 680 Seminar in Historiographical Approaches to Science (also Science and Technology Studies 680)]**

Fall. 4 credits. Not offered 1998-99.  
P. R. Dear.

Examines philosophical, sociological, and methodological dimensions of recent historiography of science.]

**[HIST 682 Topics in the Scientific Revolution (also Science and Technology Studies 682)]**

Fall. 4 credits. Not offered 1998-99.  
P. R. Dear.

This is a graduate seminar devoted to investigation of recent scholarship and issues in sixteenth- and seventeenth-century European knowledge of nature. Students will be expected to produce a substantial paper focused on the study of primary source documents. The seminar will focus alternately on the study of recent historiography in selected areas, and an examination of primary source materials intended to critique and test those historiographical approaches. Topics will include: credibility and social status; the academic environment; philosophy and court culture; the situated meaning of experiment.]

**HIST 711 Introduction to Science and Technology Studies (also Science and Technology 711)**

Fall. 4 credits. P. R. Dear.  
For description, see S&TS 711.

**American History**

**HIST 101 Introduction to American History #**

Fall. 3 credits. 101 is not a prerequisite to 102. M. B. Norton.

A survey of American history from the beginnings through the Civil War. Topics include cultural encounters in the age of Columbus, European colonization the American Revolution, the early republic, antebellum reform movements, the coming of the Civil War.

**HIST 102 Introduction to American History**

Spring. 3 credits. 101 is not a prerequisite to 102. T. Borstelmann.

An introductory survey of the development of the United States since the Civil War.

**HIST 208 Seminar: The Era of Franklin D. Roosevelt**

Fall. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students. Prerequisite: permission of instructor. R. Polenber.

The impact of the Great Depression and World War II on American politics, law, and culture.

**[HIST 209 Seminar: Political History of Indians in the United States (also American Indian Studies 209) #**

Fall. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students. Prerequisite: permission of instructor. Not offered 1998-99. D. Usner.

An investigation of political organization and change among Native American societies. Discussions and assignments examine forms of tribal government, diplomacy, and warfare, as well as political relations with European colonies and the United States. Specific topics include pan-Indian confederacies, Indian policy, struggles over sovereignty, and Indian strategies of autonomy and resistance.]

**HIST 213 Asian American History (also Asian American Studies 213)**

Fall. 4 credits. M. Jung.  
Comparative introductory history of Asian Indians, Chinese, Filipino, Japanese, and Koreans in the U.S. from about 1850 to World War II. Themes include U.S. expansionism in the Pacific, Asian migrant labor in Hawaii and the American West, the anti-Asian movement, and Asian resistance.

**[HIST 214 Seminar on American Foreign Policy**

4 credits. Not offered 1998-99.  
W. LaFeber.]

**[HIST 227 Seminar: Men and Women in Modern America (also Women's Studies 227)]**

Fall. 4 credits. Limited to 20 students. Permission of instructor required. Intended primarily for sophomores. Not offered 1998-99. M. B. Norton.]

**[HIST 238 History of Women in the Professions, 1800 to the Present (also American Studies 258, Women's Studies 238, and Human Development and Family Studies 258)]**

Spring. 3 credits. Not offered 1998-99.  
J. Brumberg.  
For description, see HDFS 258.]

**HIST 251 Black Religious Traditions from Slavery to Freedom (also American Studies 251; Religious Studies 251)**

Fall. 4 credits. Letter only.  
M. Washington.

A survey on the black religious and spiritual traditions during bondage and the early years of freedom. The course will examine slave religion, the rise of black churches in the North, the formation of black churches after the Civil War, the independent church movement and the churches' role in social protest.

**[HIST 273 Women in American Society, Past and Present (also Women's Studies 273) #**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. M. B. Norton.  
A survey of women's experiences in America from the seventeenth century to the present. Among the topics to be discussed are women's familial roles, the changing nature of household work, the women's rights movement, employment of women outside the home, racial and ethnic differences in women's experiences, and contemporary feminism.]

**HIST 276 American Indian History, 1500-1850 (also American Indian Studies 276) #**

Spring. 4 credits. D. Usner.  
A survey of North American Indian history from the sixteenth century to the mid-nineteenth century. Relations between Indian nations and with European colonies will be explored. Different cultural groups and cross-cultural encounters will be compared, with emphasis on resistance and adaptation to European colonialism. The formative years of U.S. Indian policy and the experiences of Indian people through the removal era will receive close attention.

**[HIST 277 American Indian History Since 1850 (also American Indian Studies 277)]**

Spring. 4 credits. Not offered 1998-99.  
D. Usner.  
A historical study of American Indians in the United States and Canada from the mid-nineteenth century to the present. The active and complex role played by Indian people in their responses to government policies and to socioeconomic changes will be emphasized. Challenges faced and initiatives taken by Indians will be traced from the early reservation years to the current era of self-determination. Cultural change and continuity within Indian communities will be closely examined.]

**HIST 303 African-American Women in Slavery and Freedom (also Women's Studies 307)**

Spring. 4 credits. Letter only.  
M. Washington.  
Historical exploration of African-American women from a sociopolitical perspective. Topics include women in Africa, slavery and freedom, sexuality, labor, the family, gender crossracially that begins with the African background and ends at 1900.



**HIST 304 American Culture in Historical Perspective, 1880-1980 (also American Studies 304)**

Fall. 4 credits. M. Kammen.

An introduction to American Studies and the study of modern American culture. Emphasis upon relationships between mass culture, popular culture, and high culture; and on the question of American exceptionalism (distinctiveness). Special attention also to the situation of subcultures and regions, to the changing role of entertainment in relation to leisure, the media, ethnicity (pluralism), the decorative and popular arts.

**[HIST 309 The U.S. and the Third World]**

Spring. 4 credits. Not offered 1998-99; next offered 2000-01. T. Borstelmann.

This course examines the development of American relations with Asia, Africa, Latin America, and the Middle East, with particular emphasis on the post-World War II period. Connections between domestic factors in the United States and American foreign policy will be emphasized.]

**[HIST 311 The Structure of American Political History (also American Studies 311)] #**

Fall. 4 credits. Not offered 1998-99; next offered 1999-2000. J. Silbey.

Examines the course of American politics from the eighteenth century to the Gilded Age, focusing on the development of American political culture, the nature of decision making, and the role of interest groups, political parties, and political elites in shaping our political history.]

**[HIST 312 The Structure of American Political History]**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. J. Silbey.

A continuation of History 311 but can be taken independently. Examines the course of American politics from the 1890s to the present, focusing on the massive transformation of American political life in the late nineteenth and twentieth centuries in response to industrialism and urbanization, the depression and the international crises from the 1930s to the 1990s.]

**[HIST 313 U.S. Foreign Relations, 1750-1912 #]**

Fall. 4 credits. Open to freshmen with permission of instructor. Not offered 1998-99; next offered fall 1999. W. LaFeber.

Examines the development of the U.S. continental and global empires by analyzing policy and policymakers from Benjamin Franklin to Woodrow Wilson. Emphasis is placed on domestic events that shaped foreign policy. In conjunction with Hist. 313, a special course, 301, for discussion and guided research will be offered.]

**HIST 314 History of American Foreign Policy, 1912 to the Present**

Spring. 4 credits. T. Borstelmann.

Students examine the emergence of the United States as a world power in the twentieth century. The course focuses on the domestic sources of foreign policy and the assumptions of the major policymakers (Wilson through Clinton). Important themes include the American response to a revolutionary world since 1912, the role of American racial views in the making of foreign policy, and the increasingly dominant role of the president in the making of U. S. foreign policy.

**HIST 316 American Political Thought: From Madison to Malcolm X (also Government 366) #**

Fall. 4 credits. I. Kramnick.

For description, see GOVT 366.

**HIST 318 American Constitutional Development**

Fall. 4 credits. Not open to freshmen.

R. Polenberg.

Major issues in constitutional history. Topics include: the drafting of the Constitution; the Bill of Rights; the Marshall era; the crises caused by slavery and emancipation; the rise of substantive due process; Holmes, Brandeis, and freedom of speech; the Roosevelt "revolution"; civil liberties and civil rights in modern America; the right of privacy; the contemporary Supreme Court.

**[HIST 319 The Frontier in American Thought and Culture]**

4 credits. Not offered 1998-99. D. Usner.]

**HIST 321 Colonial North America to 1763 #**

Fall. 4 credits. M. B. Norton.

A survey of European settlement in North America and the Caribbean, emphasizing the interactions of Europeans, Indians, and Africans; economic development; gender relations; religious and political change; and the impact on the colonies of internal and external conflicts.

**HIST 324 Varieties of American Dissent, 1880-1900 (also American Studies 324)**

Fall. 4 credits. N. Salvatore.

The idea of dissent in American society raises a variety of images. Civil rights activists, striking workers, and student radicals of the 1960s are familiar enough symbols of dissent. But might we understand a Pentecostal believer, filled with the spirit of his or her God in critiquing contemporary society, as an example of American dissent? This course will explore the varieties of economic, political, and cultural dissent in America between 1880 and 1990, and will examine how understanding dissent in its specific historical context illuminates major aspects of American life and culture.

**HIST 325 Age of the American Revolution, 1763-1815 #**

Spring. 4 credits. M. B. Norton.

An examination of the process by which the thirteen English colonies became an independent and united nation, with emphasis on political thought and practice, social and economic change, and cultural development. Attention will be paid to the impact of the American Revolution on women, Blacks, and Indians as well as on white males.

**[HIST 327 American Frontier History Before 1850 #]**

Fall. 4 credits. Not offered 1998-99.

D. Usner.

An overview of European exploration and colonization in North America, life on different colonial-Indian frontiers, and territorial expansion by the United States. Topics include the ideological and material frameworks of expansionism, the political and social dimensions of interethnic and imperial rivalry, and the formation of U.S. Indian and land policies. Themes of human migration, commercial development, and environmental change are emphasized.]

**[HIST 328 American Frontier History: The West since 1850]**

Spring. 4 credits. Not offered 1998-99. D. Usner.

An examination of the American West, both as place and myth, from the mid-nineteenth century to the present. Conquest of Indian territories, class and ethnic struggles, frontier ideology, and western politics are among the topics. The course comparatively studies agricultural, mining, and other frontier societies. The role of government and science in transforming western environments is closely explored, toward an understanding of recent farm, energy, and other land-use policies in the West.]

**[HIST 329 Indians, Settlers, and Slaves in the Early South (also American Indian Studies 329)] #**

Fall. 4 credits. Not offered 1998-99.

D. H. Usner.

History of the American South from the sixteenth century to the early nineteenth century with an emphasis on intercultural relations. Topics include colonization of the region by Spain, England, France, and the United States, American Indian adaptation and resistance, the evolution of slavery, African American relations with European and Indians, and the role of racial ideology and ethnic identity in the formation of the South as a distinct section of the United States.]

**[HIST 330 The Age of Jackson, 1815-1850 (also American Studies 330)] #**

4 credits. Not offered 1998-99; next offered 2000-01. J. Silbey.]

**HIST 331 The American Civil War and Reconstruction 1850-1877 (also American Studies 331) #**

Fall. 4 credits. J. Silbey.

An analysis of the factors leading up to the breakup of the Union, the impact of the war in North and South, and the problems of restoration and reconstruction of the seceded states.

**[HIST 332 The Urbanization of American Society: 1600-1860 (also American Studies 332)] #**

Fall. 4 credits. Not offered 1998-99; next offered 1999-2000. S. Blumin.

America was born in the country and moved to the city. This course examines the transformation of America from a rural to a rapidly urbanizing society and culture, from the first European settlements to the era of the Civil War. It is also a history of the city itself, as a human community, and as a crucible of cultural contact and change.]

**[HIST 333 The Urbanization of American Society: 1860-2000 (also American Studies 333)]**

Spring. 4 credits. 332 is not a prerequisite to 333. Not offered 1998-99; next offered 1999-2000. S. Blumin.

America was born in the country and moved to the city. This course examines the transformation of America from the urbanizing society and culture of the mid-nineteenth century to the thoroughly metropolitan nation of the present (and near future). It is also a history of the city itself, as a human community, a crucible of cultural contact and change, and a focus of public policy.]

**HIST 335 African-American History from Slavery to Freedom #**

Fall. 4 credits. Letter only.  
M. Washington.

Introductory course on African-Americans from 1619 to 1865. Emphasis will be on life in bondage, the free black communities, and racism. Other topics include African cultural heritage, the slave trade, religion, the family, and the black freedom struggle.

**HIST 336 Capitalism and Society in Developing America, 1607-1877 (also American Studies 336) #**

Fall. 4 credits. S. Blumin.

An examination of American society in the context of capitalist development, and of capitalism as a social phenomenon. The transformation of pre-industrial colonies into an industrializing nation; the development of social classes; the emerging ethos of free enterprise.

**HIST 337 Entrepreneurialism and Organization in the Age of the Corporation: Capitalism and Society in Modern America, 1840-2000 (also American Studies 337)**

Spring. 4 credits. S. Blumin.

An examination of American society in the context of capitalist development and of capitalism as a social phenomenon. The rise of corporate capitalism; class, "mass", and the ethos of enterprise in twentieth-century American society.

**HIST 340 Recent American History, 1925-1960**

Spring. 4 credits. Not open to freshmen.  
R. Polenberg.

Topics include the Sacco-Vanzetti case; radicalism and reform in the New Deal; Franklin Roosevelt and World War II; the Holocaust and the atomic age; the Cold War and civil liberties; individualism and conformity in the 1950s.

**[HIST 341 Recent American History, 1960 to the Present**

Spring. 4 credits. Not open to freshmen.  
Not offered 1998-99; next offered 1999-2000. R. Polenberg.

Topics include the Supreme Court and civil rights; Kennedy, Johnson, and social reform; the Vietnam War and Watergate; politics and the presidency from Carter to Clinton; and class, race, and ethnicity in modern America.]

**HIST 345 The Intellectual and Cultural Life of Nineteenth-Century Americans (also American Studies 345 and Religious Studies 345) #**

Fall. 4 credits. R. L. Moore.

An examination of the development of cultural and intellectual diversity in the United States. Particular emphasis will be placed on religious pluralism.

**[HIST 346 The Modernization of the American Mind (also American Studies 346)**

Spring. 4 credits. Not offered 1998-99.  
R. L. Moore.

American thought and culture from 1890 to the present. Emphasizes the intellectual impact of major political and economic events and the adaptation of social ideas and values to new conditions.]

**[HIST 359 American Families in Historical Perspective (also American Studies 359, HDFS 359, and Women's Studies 357)**

Spring. 3 credits. Prerequisite: HDFS 150 or one 200-level social science or history course. S-U grades optional. Human ecology students must register for HDFS 359. Not offered 1998-99. J. Brumberg.  
For description, see HDFS 359.]

**[HIST 375 The African-American Workers, 1865-1910: The Rural and Urban Experience (also ILRCB 385) #**

Fall. 3 credits. Prerequisite: juniors and seniors, or permission of instructor. Not offered 1998-99. N. Salvatore.  
For description, see ILRCB 385.]

**[HIST 376 The African-American Workers, 1910-the present: Race, Work, and the City**

Not offered 1998-99. N. Salvatore.  
For description, see ILRCB 386.]

**HIST 411 Undergraduate Seminar in American Political History**

Fall. 4 credits. Prerequisite: permission of instructor. W. LaFeber and J. Silbey.  
Topic for fall 1998: American Politics and Foreign Affairs, 1840-1916.

**HIST 412 Undergraduate Seminar in Asian American History (also Asian American Studies 412)**

Spring. 4 credits. M. Jung.  
A reading and research seminar that will cover various topics in Asian American history.

**HIST 414 Motivations of American Foreign Policy**

Fall. 4 credits. Prerequisite: permission of instructor. W. LaFeber.  
Topic for Fall 1998: obtaining consensus in a democracy for U.S. foreign policy during the Cold War and after.

**[HIST 418 Undergraduate Seminar in the History of the American South**

4 credits. Not offered 1998-99; next offered 1999-2000. J. Silbey.]

**[HIST 419 Seminar in American Social History (also American Studies 419)**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
N. Salvatore.

This undergraduate seminar will focus this semester on the social and cultural dimension of the urban black experience in the decades following World War II. A research paper is required.]

**HIST 421 Undergraduate Seminar in American Cultural History (also American Studies 421)**

Spring. 4 credits. Prerequisite: permission of instructor. M. Kammen.  
The emergence of popular, middlebrow, and mass culture in the U.S., along with the discourse among cultural critics concerning all three in relation to traditional high culture. The underlying context will concern the changing uses of leisure in twentieth-century American and conflicting attitudes toward cultural taste levels in a democratic society.

**[HIST 426 Undergraduate Seminar in Early American History (also Women's Studies 426) #**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. M. B. Norton.]

**[HIST 429 Undergraduate Seminar in Indians of Eastern North America (also American Indian Studies 429) #**

Fall. 4 credits. Not offered 1998-99.  
D. Usner.

A seminar examining the history of Native Americans in the eastern woodlands from colonial times to the present. The cultural and economic participation of Indians in the evolution of frontier societies will be examined. Major topics include fur-trade networks, political relations, removal, and the persistence of Indian communities in eastern states.]

**[HIST 432 The City in History: Europe and America #**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
S. Blumin.

Reading and discussion of significant interpretations of the rise, role, and character of cities in medieval and early modern Europe, and in modern Europe and America. Individual research projects.]

**[HIST 438 Reform in Antebellum America**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99; next offered 1999-2000. M. Washington.  
An examination of American society from 1830 to 1860 through the eyes of people attempting to bring change. The emphasis will be on individuals, such as William Lloyd Garrison, Abby Kelly Foster, and Horace Bond. The course will also emphasize issues such as slavery, temperance, Indian removal, and public education.]

**HIST 440 Undergraduate Seminar in Recent American History**

Spring. 4 credits. Prerequisite: permission of instructor. R. Polenberg.  
Topic: freedom of speech, censorship, and the Supreme Court.

**HIST 442 Religion and Politics in American History: From J. Winthrop to R. Reed (also American Studies 442 and Religious Studies 442)**

Fall. 4 credits. Prerequisite: permission of instructor. R. L. Moore.

A reading and research seminar concerned with popular culture in nineteenth-century America (publications, performances, and audiences).

**HIST 458 Female Adolescence in Historical Perspective (also Women's Studies 438 and Human Development and Family Studies 417) #**

Spring. 3 credits. Prerequisite: permission of instructor. J. Brumberg.  
For description, see HDFS 417.

**[HIST 484 Seminar in the History of American Labor: Race, Work, and the City (also ILR 304)**

Fall. 4 credits. Open to juniors and seniors only with the permission of the instructor. Not offered 1998-99.  
N. Salvatore.  
For description, see ILRCB 304.]

**HIST 486 Seminar on the 1960s**

Fall. 4 credits. T. Borstelmann.  
This course will explore the issues and developments of the most turbulent and significant decade in recent U.S. history. Major topics will include the civil rights movement, the Kennedy and Johnson administrations, the Vietnam War, the anti-war

movement, the counterculture, the women's liberation movement, the media, and the Nixon administration. A substantial research paper will be required.

**HIST 500 Undergraduate Research Seminar (also American Studies 500)**

Fall and spring. 8 credits each term.

S. Blumin and others.

Offered in Cornell-in-Washington Program. An intensive research and writing experience utilizing the extensive resources of Washington, D.C.

**[HIST 521 Seminar in American Cultural Studies (also American Studies 521)]**

Fall. 4 credits. Not offered 1998–99.

M. Kammen.

The focus will be the relationship between government and culture in historical perspective. After three contextual sessions devoted to 19th-century background, we will mainly be concerned with the period from the 1930s to the present. Several comparative sessions will be devoted to government as a patron of culture in other societies. A research paper is required.]

**[HIST 607 Writing Seminar on African-American Women]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998–99; next offered 1999–2000. M. Washington.

This course is designed for students actively engaged in a writing project on African-American women's history. Students must have already done the research and most of the reading for their papers prior to enrollment. Reading and class discussion will focus on style, methodology, and theory. An extensive research paper is due at the end of the semester.]

**HIST 608 African-American Women**

Spring. 4 credits. Prerequisite: permission of instructor. Letter only.

M. Washington.

A reading and discussion topics seminar focusing on the experiences of African-American women in nineteenth-century America, including the Caribbean. Topics include women and labor, abolitionism, women's rights, sexuality and race relations, education and racial uplift, black women's literature, marriage and family.

**HIST 610 Afro-American Historiography**

Fall. 4 credits. Letter only.

M. Washington.

Reading and discussion course focusing on the way historians write and interpret the Black experience in America. Students will be concerned with individual historians, various schools of thought, and historical approaches.

**[HIST 613 Seminar on American Diplomatic History]**

Fall. 4 credits. Not offered 1998–99.

T. Borstelmann.

A reading and research seminar in twentieth-century American diplomatic history, emphasizing the Cold War period and interpretive approaches to U.S. foreign policy. A research paper is required.]

**[HIST 617 Seminar in American Cultural History]**

4 credits. Not offered 1998–99. Semester/TBA. R. L. Moore.]

**HIST 618 Seminar in American Cultural History**

Spring. 4 credits. R. L. Moore.

A reading and research seminar concerning selected topics in nineteenth century America.

**[HIST 621 Graduate Seminar in American History]**

Fall. 4 credits. Not offered 1998–99.

M. Kammen.]

**HIST 624 Graduate Seminar in American Indian History (also American Indian Studies 624)**

Spring. 4 credits. D. Usner.

This seminar examines, through a selected series of major topics and problems, the historical study of North American Indians. Various approaches in history—together with anthropology, political science, folklore, and other disciplines—are explored. Emphasis is placed on current interpretations and directions.

**HIST 626 Graduate Seminar in the History of American Women (also Women's Studies 626)**

Spring. 4 credits. M. B. Norton.

A reading and research seminar intended primarily for graduate students. Major works in American women's history will be carefully scrutinized, and each student will prepare a lengthy research paper.

**[HIST 627 Graduate Seminar in Early American History]**

4 credits. Not offered 1998–99.

M. B. Norton.]

**[HIST 633 Seminar in Nineteenth-Century American History]**

4 credits. Prerequisite: permission of instructor. Not offered 1998–99; next offered 1999–2000. J. Silbey.]

**[HIST 634 Seminar in Nineteenth-Century American History]**

Spring. 4 credits. Not offered 1998–99; next offered 1999–2000. J. Silbey.

A research seminar intended primarily for graduate students exploring society, culture, and politics of the United States between 1815 and 1896.]

**[HIST 640 Graduate Seminar in Recent American History]**

Fall. 4 credits. Prerequisite: permission of instructor. R. Polenber.

A graduate research seminar that will examine American legal and constitutional history.]

**[HIST 683 Seminar in American Labor History (also ILRCB 783)]**

Fall. 3 credits. Prerequisites: graduate students only. Not offered 1998–99.

N. Salvatore.

For description, see ILRCB 783.]

**HIST 710 Colloquium in American History**

Spring. 4 credits. Required of all first-year graduate students in United States history.

M. Kammen.

Examination of major approaches, periods, issues, and modes of interpreting American history. Readings include recent "classics" of American scholarship from diverse subfields and genres.

## Latin American History

**HIST 201 Seminar: Immigration and Ethnicity in Twentieth-Century U.S.**

Spring. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students.

Prerequisite: permission of instructor. M. C. Garcia.

This seminar will look at immigration to the United States in the twentieth century, highlighting the experiences of several groups as case studies. We will analyze the "push/pull" factors that compelled people to come to the United States; the nature of cultural and structural assimilation; nativist movements; the evolution of U.S. immigration policy; the formation of ethnic identity in U.S. society. Attention will be given to current issues such as immigration reform, bilingual education; and the multiculturalism debate.

**HIST 260 Introduction to U. S. Latino History, Part I (also Latino Studies Program 260)**

Spring. 4 credits. M. C. Garcia.

This course introduces students to the history of Latinos in the United States. We will focus specifically on the history of Chicanos (Mexican Americans) and Central Americans. Part II of this course, History 261, focuses on the history of Puerto Ricans, Cubans, and Dominicans in the U.S. (students are not required to take both courses). Among the topics that will be addressed are: historical immigration patterns and the "push/pull" factors that compelled migration to the United States; the social and political events that shaped the evolution of these Latino communities; the role of cultural identity, race, class, and gender in shaping experience; the role of foreign policy in formulating immigration policy.

**HIST 295 Colonial Latin America @ #**

Fall. 4 credits. M. Roldan.

Survey of Latin America from the rise of pre-Columbian civilizations through the European conquest, the establishment of the Spanish and Portuguese colonial societies, imperial rivalries in the New World, the background of the independence movements, and the achievement of political independence.

**HIST 296 Latin America in the Modern Age @**

Spring. 4 credits. T. Holloway.

Survey of the Latin American nations from independence to the present. Major themes include the persistence of neocolonial economic and social institutions, the development of nationalist and populist politics, revolutionary movements of the twentieth century, and United States–Latin American relations.

**HIST 347 Agrarian Societies in Latin American History @ #**

Spring. 4 credits. T. Holloway.

The development of rural patterns of wealth, status, and power, focusing on the role of country people in the larger society. Topics include disruption of the conquest, evolution from *encomienda* to *hacienda*, rise of plantation agriculture and export enclaves, decline of Indian communities, peasant protest, and land reform and development programs of the recent past.

**[HIST 348 Contemporary Brazil @**

Fall. 4 credits. Not offered 1998-99.

T. Holloway.

With some historical background, the course focuses on the twentieth century. Topics include the import-substituting growth model, contradictions leading to military rule 1964-1985, transition to competitive politics, debt, ecology, regional and social disparities. Some comparisons are made to other Latin American countries.]

**[HIST 424 Art and Politics in Twentieth-Century Latin America**

Fall. 4 credits. Prerequisite: permission of instructor. M. Roldan.

This seminar will examine how the intersection of art and politics shaped culture, ideology, and identity in Latin America from the Mexican Revolution to the dictatorships of the late twentieth century. Topics may include the muralism and the Mexican Revolution; the artist as muse and activist (Frida Kahlo); working class and immigrant culture in Argentina and the tango; samba as social and political protest in Brazil; gender and politics in exiled women's literature; the appropriation of public spaces as artistic forum and means of communication under authoritarian regimes.

**[HIST 449 Race and Class in Latin American History**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.

T. Holloway.

This seminar focuses on ethnic interaction and class formation in the historical development of Latin American societies considering the roles of Native Americans, Europeans, and Africans. Each unit will be approached as an analysis of the historical origins of contemporary patterns, and comparisons will be made among units, in a search for underlying and overarching themes.]

**[HIST 649 Seminar in Latin American History**

Spring. 4 credits. Not offered 1998-99.

T. Holloway.)

**African History****[HIST 255 Cultures and Ecology in Precolonial Africa @ #**

Fall. 4 credits. S. E. Greene.

This course will examine the history of Africa, from the origins of humankind up to 1800 by focusing on a number of controversial issues about the African past. Why did humankind emerge in Africa? Who were the ancient Egyptians? What "race" were they and is this important anyway? If so, why? How did the ecological environments of the past shape African cultures and their histories? What role did women play in early African societies and what can this information tell us about how human societies have operated from time immemorial? What role did the slave trade play in influencing the current economic position of Africa and race relations in the U.S. today?

**[HIST 390 Southern African History @ #**

Spring. 4 credits. Not offered 1998-99.

G. Okihoro.

Southern African history from foundations to union, or from the earliest human inhabitants to 1910. Major themes will include the peopling of southern Africa, interaction and change among the San, Khoikhoi, and Bantu-

speaking peoples, the arrival and expansion of Europeans, African state systems, and the economic transformation of the 1870s and 80s leading to the South African war and union.]

**[HIST 391 Riot and Revolution in Nineteenth Century Africa: The Birth of the Modern**

Spring. 4 credits. S. E. Greene.

The beginning of the nineteenth century witnessed the rapid and often times forceful expansion of Islam in West Africa, the end of the Atlantic slave trade, the transformation of the Zulu from a small, inconsequential people to the largest and most powerful ethnic group in South Africa, and the wild fire spread of Swahili as a lingua franca in east and central Africa. This course explores these revolutionary changes and the upheavals that accompanied them as Africa remade itself to face the modern era. Lectures, readings and discussions will focus on the causes and consequences of these events and their significance for understanding contemporary Africa.

**[HIST 407 The Colonial Encounter**

Spring. 4 credits. Prerequisite: permission of instructor. S. Greene.

The course examines the way colonizer and colonized influenced the culture, history and identity of the other. Emphasis is on exploring the colonial encounter as a phenomenon in itself as well as both sides of the unequal equation that linked specific European countries (for example, France, England, Germany, Netherlands) with the states they colonized in Africa and Asia where this linkage challenged at different times in different places pre-existing understandings of self, country, and culture, as well as notions about the other.

**[HIST 434 Gender and Sexuality in the Social History of Africa (also Women's Studies 477) @ #**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. S. Greene.

This course will examine the history of gender relations in Africa during the precolonial and colonial periods. Among the questions to be explored: what was the nature of gender relations in precolonial Africa; how were these relations affected by the entrance of Islam, the Atlantic slave trade, and other changes that affected particular African societies; what factors influenced the nature and extent of that impact; how did African men and women define gender and sexual identities and how did particular historical forces such as colonialism and the entrance of Christianity and Islam affect these identities.]

**Asian History****[HIST 190 Introduction to Asian Civilizations @ #**

Spring. 4 credits. C. Peterson, D. Wyatt.

An introduction to the distinctive cultures of China, India, Japan, and Southeast Asia that features an intensive examination of selected topics and periods of particular significance in the history of each.

**[HIST 191 Introduction to Modern Asian History @**

Fall. 4 credits. Not offered 1998-99; next offered 1999-2000. S. Cochran, D. Wyatt.

The history of Asia-Pacific from the nineteenth century to the present, focusing on relations of China, Japan, and Southeast Asia with each other and with the West.]

**[HIST 230 Seminar in History and Memory: The Asia-Pacific War**

Fall. 4 credits. Seminar designed for underclassmen but open to all students.

Enrollment limited to 15 students.

Prerequisite: permission of instructor. Not offered 1998-99. J. V. Koschmann.

This seminar will examine what is at stake when the fighting between Japan and its former enemies in the Pacific during World War II is remembered, memorialized, and (re)constructed as historical narrative by Japanese, Americans and others. By exploring the legacies of such events and processes as the Rape of Nanking, live testing of biological and chemical warfare agents, sexual slavery, incendiary bombings of Hiroshima and Nagasaki, the seminar will offer an opportunity to reflect in a more general way on the politics of historical representation and memory.]

**[HIST 243 Seminar: China and the West before Imperialism @ #**

Spring. 3 credits. Seminar designed for underclassmen but open to all students.

Enrollment limited to 15 students.

Prerequisite: permission of instructor. C. Peterson.

What accounts for the first great passion for things Chinese in the West (from the sixteenth to the nineteenth centuries) followed by the hostility characteristic of imperialism? This seminar explores this question relying heavily on original sources to trace the China vogue in thought, literature and art and comparing the Western image with the realities of China of that day.

**[HIST 244 Seminar: History of Slam and Thailand**

Fall. 4 credits. Seminar designed for underclassmen but open to all students.

Enrollment limited to 15 students.

Prerequisite: permission of instructor. D. Wyatt.

An examination of the long history of the central position of the Indochina Peninsula, based on close reading of the primary sources (in translation).

**[HIST 293 History of China up to Modern Times @ #**

Fall. 4 credits. C. A. Peterson.

A survey of the principal developments in the history of China from the earliest times to the eighteenth century that also undertakes a topical introduction to Chinese culture and civilization, in part by the use of visual materials.

**[HIST 294 History of China in Modern Times @**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. S. Cochran.

A survey that concentrates on the rise of the last imperial dynasty in the seventeenth and eighteenth centuries, the upheavals resulting from domestic rebellions and foreign imperialism in the nineteenth century, and the twentieth-century efforts to achieve social mobilization, political unity, and commercial expansion.]

**[HIST 297 Japan Before 1600 @ #**

Fall. 4 credits. J. Piggott.

This course explores Japan before 1600 from a variety of perspectives. Analysis of primary sources, including literary and archaeological experiences compared with those of other societies around the globe. History 297 is a good introduction to issues of premodern



historical study and to the general study of East Asia. (Graduate students or more advanced undergraduates who would like to do a research project should register for History 497).

**HIST 298 State, Society, and Culture in Modern Japan @**

Spring. 4 credits. J. V. Koschmann.  
A survey of Japan from early-nineteenth century to the present, which attempts to connect the political, socio-economic, and imaginative realms of modern Japanese life so as to achieve a complex view of modern Japanese society. Pays particular attention to the changing situation of women and women's movements, Japan's relations with Asia and the U.S., and problems of historical representation and consciousness. Readings will include Japanese works in translation as well as secondary sources.

**HIST 322 Taming the Samurai: Warrior History in Japan # @**

Spring. 4 credits. J. Piggott.  
This course explores the role of the *samurai* at various epochal moments in Japan, and the effects samurai-centered governance has had on culture writ broadly up to the early modern era. This is very much a hands-on course in which analysis and writing are emphasized—students will do extensive analysis of primary sources, write a critical book review, and write a final essay. Graduate students are welcome but should register for History 522 after consultation with the instructor.

**[HIST 326 From Medieval to Early Modern in Japan # @**

4 credits. Not offered 1998–99. J. Piggott.]

**[HIST 360 Early Warfare, East and West #**

Spring. 4 credits. Not offered 1998–99.  
C. A. Peterson.  
For description see Comparative History.]

**[HIST 393 Images of Humanity in Medieval China (also Asian Studies 393) @ #**

Fall. 4 credits. Permission required. Not offered 1998–99. C. A. Peterson.]

**[HIST 395 Southeast Asia to the Eighteenth Century @ #**

Fall. 4 credits. Not offered 1998–99; next offered 1999–2000. D. Wyatt.  
A survey of the earlier history of Southeast Asia, concentrating particularly on regional movements of economic, social, cultural, and political change and using, to the extent possible, readings in translated primary sources.]

**[HIST 396 Southeast Asian History from the Eighteenth Century @**

Spring. 4 credits. Not offered 1998–99; next offered 1999–2000.  
A survey of the modern history of Southeast Asia with special attention to the formation of modern states (colonial as well as national), changing economic and social structure, and consciousness. Primary texts will be read in translation whenever feasible.]

**HIST 420 Japan in the Year 1000: The Tale of Genji in Historical Perspective @ #**

Fall. 4 credits. Prerequisite: permission of instructor. J. Piggott.  
The tale of Genji is a classic of premodern Japanese literature that provides readers a broad view into Japan's courtly society at a

time when many of the elements of Japan's classical tradition were taking form. Additional primary source readings and secondary sources provide insight into the countryside beyond the capital as well. Previous study of premodern Japan is advised.

**HIST 448 Family and Gender Relations in Premodern Japan # @**

Spring. 4 credits. Prerequisite: permission of instructor. J. Piggott.  
An inquiry into structures of family and gender in the classical and medieval periods. Themes will include kinship and family organization, state formation, and gender construction. Those interested in comparative perspectives are encouraged to enroll. "Breadth" reading, primary source materials, and comparative reading placing Japan in an East Asian context will be emphasized. Previous study of premodern Japan and East Asia is recommended.

**[HIST 466 Kings and Shoguns @ #**

Spring. 4 credits. Not offered 1998–99; next offered 1999–2000. J. Piggott.  
The turn of the fourteenth century witnessed epochal changes in Japan as structures of monarchy, court-*Bakufu* relations, land-holding, judiciary, international relations, and popular culture were deeply affected by the failure of Go-Daigo Tenno's royal restoration. Core readings of the seminar will include portions of the martial epic, the *Taiheiki*, and other materials from which insights into these transformations can be drawn. Previous course work in Japanese history, especially History 322, is recommended.]

**[HIST 489 Seminar in Modern Japanese History @**

Fall. 4 credits. Prerequisites: History 298 or equivalent. Not offered 1998–99; next offered 1999–2000. J. V. Koschmann.]

**HIST 492 Undergraduate Seminar in Medieval Chinese History @ #**

Spring. 4 credits. Prerequisite: History 190, 293, 360, or permission of instructor. C. A. Peterson.  
Topic for spring 1999: the intellectual and cultural life of the medieval Chinese literati including an examination of their careers, literary output, and private lives.

**[HIST 493 Problems in Modern Chinese History (also History 693) @**

Fall. 4 credits. Prerequisite: History 294 or permission of instructor. Not offered 1998–99; next offered 1999–2000. S. Cochran.  
Conflicting interpretations of Chinese history during the late imperial period and the first half of the twentieth century.]

**[HIST 495 Asian Kingship and State Formation @ #**

Fall. 4 credits. Prerequisite: previous coursework in Asian history and consultation with the instructor. Not offered 1998–99; next offered 1999–2000. J. Piggott.  
The seminar will explore kingship and state formation in comparative perspective. Readings will include theoretical and ethnohistorical work on societies across the globe, East and West. In addition to participating in discussion focused of core readings, seminar members will undertake research projects targeting societies of their choice. Students with an interest in the history of preindustrial societies, political and cultural anthropology, and religion will find the seminar stimulating.]

**HIST 497 Colloquium in Premodern Japanese History @ #**

Fall. 4 credits. J. Piggott.  
Explores the premodern civilization of Japan from a variety of historical perspectives. Students will attend History 297 lectures and participate in a special weekly colloquium.

**[HIST 499 Problems in Modern Chinese History (also History 694) @**

Spring. 4 credits. Prerequisite: History 294 or permission of instructor. Not offered 1998–99; next offered 1999–2000. S. Cochran.  
This course gives each student an opportunity to select one research topic and work on it throughout the semester. Knowledge of Chinese is not required, but background in Chinese studies is needed.]

**HIST 588 Proseminar in Modern Korean History**

Spring. 4 credits. Prerequisite: a course on East Asian history or equivalent. J. V. Koschmann.  
Designed primarily for graduate students in East Asian Studies who specialize in Chinese and/or Japanese history but need for comparative or other purposes to develop a familiarity with the main problems and contours of modern Korean history. Readings will be selected primarily from English-language works on Korea from the 1870s through the post-World War II era, including Japanese colonial policy and practice in Korea, the Korean War, and the postwar history of the Republic of Korea.

**HIST 598 Colloquium in Modern Japanese History**

Spring. 4 credits. J. V. Koschmann.  
For graduate students only. Students will attend lectures and do the reading for History 298, participate in a special weekly colloquium, and write a seminar paper.

**[HIST 609 Modern Japan Studies: The Formation of the Field in History and Literature (also Asian Studies 609)**

Fall. 4 credits. Not offered 1998–99; next offered 1999–2000. J. V. Koschmann and N. Sakai.  
The course will provide both a historical introduction to and critical analysis of the constitution of modern Japan studies as a "field" of postwar academic inquiry. While reading texts particularly influential in the early and contemporary formation of the field, we will consider such questions as the domestic and international contexts in which Japanese studies has been institutionalized and maintained, and the relationship between "Japan" as object of area studies discourse and "Japan" as represented in American journalism, popular culture, and politics. Interdisciplinary and team-taught, the course will aim to introduce students to a range of methodologies and approaches developed in historical and critical works, problematizing assumptions in each case. Possibilities for cross-disciplinary research (along lines recently undertaken in areas such as feminist criticism and cultural studies, for example), will also be explored.]

**HIST 691 Chinese Historiography and Source Materials**

Spring. 4 credits. Prerequisite: permission of instructor. C. Peterson.

**[HIST 693 Problems in Modern Chinese History (also History 493)]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99; next offered 1999-2000. S. Cochran.  
Conflicting interpretations of Chinese history during the late imperial period and the first half of the twentieth century.]

**[HIST 694 Problems in Modern Chinese History (also History 499)]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99; next offered 1999-2000. S. Cochran.  
For description, see HIST 499.]

**HIST 695 Early Southeast Asia: Graduate Proseminar**

Fall. 4 credits. D. Wyatt.  
Introduction to the history of Southeast Asia for graduate students.

**[HIST 696 Modern Southeast Asia: Graduate Proseminar]**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000.  
Introduction to the modern history of Southeast Asia for graduate students. Students will be expected to attend the lectures and complete the readings for History 396, and they will meet separately as a group to further explore selected topics.]

**[HIST 791 Seminar in Medieval Chinese History]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
C. A. Peterson.]

**[HIST 792 Seminar in Medieval Chinese History]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
C. A. Peterson.]

**[HIST 795 Seminar in Modern Southeast Asian History]**

Fall. 4 credits. Permission of the instructor. Not offered 1998-99.]

**HIST 796 Seminar in Southeast Asian History**

Spring. 4 credits. Prerequisite: reading knowledge of relevant languages.  
D. Wyatt.

**HIST 797 Seminar in Japanese Thought**

Fall. 4 credits. Prerequisite: reading knowledge of Japanese and permission of instructor. J. V. Koschmann.

**[HIST 798 Seminar in Japanese Thought]**  
4 credits. Prerequisite: reading knowledge of Japanese and permission of instructor. Not offered 1998-99. J. V. Koschmann.]

**Near Eastern History****[HIST 254 Islamic History: 600-1258 (also Near Eastern Studies 257 and Religious Studies 257)] @ #**

Fall. 3 credits. Not offered 1998-99.  
D. Powers.  
For description, see NES 257.]

**HIST 317 Islamic History: The Age of Ibn Khaldun (also Near Eastern Studies 356)**

Spring. 4 credits. Prerequisite: NES 257 or equivalent. D. Powers.  
For description, see NES 356.

**[HIST 372 Introduction to Islamic Law (also History 652, Near Eastern Studies 351/651, Religious Studies 350)] @ #**

Fall. 4 credits. Enrollment is limited to 25 students. Not offered 1998-99.  
D. Powers.  
For description, see NES 351.]

**[HIST 460 Seminar in Islamic History: Muhammad and the Rise of Islam (also Near Eastern Studies 418 and Religious Studies 418)] @ #**

4 credits. Not offered 1998-99.  
D. Powers.  
For description, see NES 418.]

**[HIST 461 Seminar in Islamic History 600-750 (also History 671, Near Eastern Studies 451 and 650, and Religious Studies 451)] @ #**

Spring. 4 credits. Enrollment is limited to 25 students. Not offered 1998-99.  
D. Powers.  
For description, see NES 451.]

**[HIST 652 Introduction to Islamic Law (also History 372, Near Eastern Studies 351/651, Religious Studies 350)] @ #**

Fall. 4 credits. Enrollment is limited to 25 students. Not offered 1998-99.  
D. Powers.  
For description, see NES 351.]

**[HIST 671 Seminar in Islamic History (also History 461, Near Eastern Studies 451, and 650, and Religious Studies)]**

Spring. 4 credits. Not offered 1998-99.  
D. Powers.  
For description, see NES 451.]

**Ancient European History****HIST 151 Introduction to Western Civilization #**

Fall. 4 credits. S. Pohl.  
A survey of European history from Antiquity to the Renaissance and Reformation. Important themes will include the influence of ancient culture on medieval society, the formation of Christendom, the development of and conflict between secular and ecclesiastical governments, religious reform movements, and the rise of lay spirituality. Specific topics to be covered include European encounters with the non-European, the culture and role of minority groups within European society, and the roles of women. Emphasis is placed on close readings of primary works, including literary and visual sources.

**[HIST 228 Seminar: War and Peace in Greece and Rome]**

Spring. 3 credits. Not offered 1998-99.  
B. Strauss.

A study of war and peace in the ancient Mediterranean world in light of modern theories of international relations. The course will test the validity of modern theories against ancient models and will ask what the ancient experience can contribute to modern theory and practice. Case studies include the Peloponnesian War, the Second Punic War, Alexander's conquests, and the defense of the Roman Empire.]

**[HIST 232 Seminar: Eyewitness to War in the Ancient World]**

Fall. 3 credits. Not offered 1998-99.  
B. Strauss.

A study of ancient soldier-historians who participated in the campaigns about which they later wrote. Topics include historicity, autobiography, propaganda, prose style. Readings include selections from Thucydides, Xenophon, Julius Caesar, Josephus, Ammianus Marcellinus as well as, for comparative purposes, modern soldier-historians.]

**[HIST 265 Ancient Greece from Homer to Alexander the Great #]**

Spring. 4 credits. Open to freshmen. Not offered 1998-99. B. Strauss.

A survey of Greece from the earliest times to the end of the Classical period in the late fourth century B.C. The course focuses on the Greek genius: its causes, its greatness, its defects, and its legacy. The Heroic Age, the city-state, ancient democracy, and the intellectual ferment of the Greek Enlightenment are the main topics of study. Readings in translation from Homer, Aristophanes, Sophocles, Herodotus, Thucydides, Plato, Aristotle, and from the evidence of ancient inscriptions, coins, art, and architecture.]

**HIST 268 A History of Rome from Republic to Holy City #**

Spring. 4 credits. Open to freshmen.  
J. Ginsburg.

A survey of Rome and its empire from the beginning to late antiquity. This course will explore the formation of Rome's Mediterranean empire and its political, social and economic consequences; the constitutional and social struggles of the late Republic; the transition from Republic to Principate; society and state under the Caesars; the nature and limits of governing a world empire; the interaction of pagans, Christians and Jews in the Roman world.

**[HIST 367 Representations of Women in Ancient Greece and Rome (also Classics 363 and Women's Studies 363)]**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. L. Abel and J. Ginsburg.  
For description, see Class 363.]

**[HIST 452 The Tragedy of Classical Athens, 462-404 B.C. #]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
B. Strauss.

The nature of Athenian democracy, society, and culture in the "golden age" of Athens. The course will examine the influence of Athenian political life on the great tragedians of the age and the influence of tragedy on the Athenians' conception of their character and history. Readings from Herodotus, Thucydides, Aeschylus, Sophocles, Euripides, Aristophanes, Plato, Aristotle, and Plutarch.]

**[HIST 453 Crisis of the Greek City-State, 415-336 B.C. #]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99; next offered 1999-2000. B. Strauss.

The fortunes of the city-state and citizen in an age of uncertainty. The focus is on Athens with some attention paid to the wider Greek world. Topics include the nature of Athenian politics, Athenian society, cultural change, and war between the city-states, crisis as a historical concept, and anthropology and ancient Greece. Readings in translation include Thucydides, Sophocles, Euripides, Aristophanes, Plato, Aristotle, Demosthenes, and Xenophon.]

**[HIST 463 Gender and Politics in the Roman World (also Classics 463 and Women's Studies 464) #**

Not offered 1998–99; next offered 1999–2000. J. Ginsburg.

For description, see CLASS 463.]

**[HIST 473 Roman Society and Politics under the Julio-Claudians (also Classics 480) #**

Spring. 4 credits. Prerequisite: Classics 212, History 268, or permission of instructor. Not offered 1998–99; next offered 2000–01. J. Ginsburg.

For description, see Classics 480.]

**[HIST 630 Topics in Ancient History**

Fall. 4 credits. Not offered 1998–99. B. Strauss.]

## Medieval, Renaissance, and Early Modern European History

**HIST 151 Introduction to Western Civilization #**

Fall. 4 credits. S. Pohl.

For description see Ancient European History.

**HIST 152 Introduction to Western Civilization #**

Spring. 4 credits. R. L. Moore and M. Steinberg.

For description see Modern European History.

**HIST 204 Seminar: Age of Atlantic Revolution**

Fall. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students. Prerequisite: permission of instructor. R. Weil.

"All the Atlantic Mountains shook," wrote the poet William Blake of the revolutions which toppled regimes across Europe and the Americas at the end of the 18th century. This course will explore the ideas, outcomes and connections among events in America, France, Haiti, and Britain, through literary and philosophical texts: Wordsworth, Rousseau, Jefferson, Paine, Burke, Godwin, Tocqueville, and even Jane Austen.

**HIST 231 Seminar: Witchcraft, Magic, and the Occult in Europe, 1400–1700 #**

Fall. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students. Prerequisite: permission of instructor. S. Pohl.

A study of attitudes toward magic, witchcraft, astrology, specters and demons in late medieval and early modern Europe and what they reveal to us about religious beliefs, concepts of community, and gender relations. Special attention will be given to the role the Christian Church claimed in defining the occult: which aspects it legitimated and which it condemned. Other topics include the influence of humanism, the Reformation, and the Scientific Revolution on attitudes toward the occult. We shall also undertake an analysis of the historiographical model which opposes "elite" to "popular" ideas. The course emphasizes close analyses of primary works, including literary and visual sources.

**[HIST 233 Seminar: The Politics of Religion in Early Modern Europe**

Spring. 4 credits. Not offered 1998–99. R. Weil.

We will look at the impact of the reformation, counter-reformation and wars of religion on

aspects of political, social and cultural life in 16th and 17th-century Europe, exploring shifts in gender relations, the problem of social control, the effect of religious conflict on the power of the state and its contested boundaries with the church, the relationship of elite and popular religion, and the encounter of European missionaries with other cultures. Students will engage with major historiographical interpretations of the period, as well as with the close reading of primary sources.]

**HIST 234 Seminar: Gender in Early Modern Europe (also WOMNS 234)**

Spring. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students. Prerequisite: permission of instructor. R. Weil.

An inquiry into how masculinity and femininity were defined in early modern Europe. Questions to be explored include: What purpose did gender distinctions serve in this particular society? To what extent were men and women able to shape and redefine the meaning of their gender? How was their ability to do so affected by such events as the Reformation and the French Revolution?

**[HIST 257 English History from Anglo-Saxon Times to 1485 #**

Fall. 4 credits. Not offered 1998–99; next offered 2000–01. P. Hyams.

A survey of the government, social organization, and cultural and religious experience of the English people. Particular stress is laid on land settlement, the unification of the realm, the emergence of state institutions such as Parliament, and changes in economic organization (manors, towns and commerce). The approach will be comparative within a context of contemporary European developments. The course offers students who wish to work on their writing skills an opportunity to do so, especially in the second paper.]

**[HIST 259 The Crusades # @**

Fall. 4 credits. Not offered 1998–99; next offered 1999–2000. P. Hyams.

A lecture course examining the Crusading Movement and the States it produced from the eleventh century to the fall of the mainland Kingdom of Jerusalem in 1292. The historical themes this generates are almost unlimited. The course treats the Christianity and Chivalry of the Medieval West, the confrontation of this culture with those of the Mediterranean and Islam, and what is perhaps the cradle of Western Colonialism. The very concept of "Crusade" itself is problematic today and will continue to cast its shadow on U.S. dealings with the Middle East. The sometimes spectacular readings allow students to choose from a very wide range of paper topics, and enjoy an excellent introduction to every aspect of the long-gone world of the Middle Ages.]

**HIST 262 The Middle Ages: An Introduction and Sample (also Religious Studies 265) #**

Fall. 4 credits. P. Hyams.

As a single-semester alternative to History 263–4, this survey aims to convey what was significant in that area of the "West" that was to become Europe, between the end of the Roman Empire in the West and the Renaissance, from 395 to 1400. It thus takes a critical look at a formative period of Western Civilization. The course is organized into modules. The first of which surveys in five weeks the main public developments in

Political and Church History over the period. Other modules focus in some depth on select aspects, such as technology, music, material resources and religions, to other choice samples from the best of medieval culture. The emphasis is on students finding their own ways to win credit.

**[HIST 263 The Earlier Middle Ages (also Religious Studies 263) #**

Fall. 4 credits. Not offered 1998–99. J. J. John.

A survey of medieval civilization from ca. 300 to ca. 1100 dealing with religious, intellectual, political, and economic developments in Western Europe.]

**[HIST 264 The High Middle Ages #**

Fall. 4 credits. Not offered 1998–99; next offered 1999–2000. P. Hyams.

A survey of medieval civilization 1100–1400, dealing with political, economic, religious, and intellectual developments in Western Europe. Special attention will be paid to the interaction of different kinds of history and to the historian's understanding of literature and its use as a primary source. Lectures and class discussions.]

**HIST 275 Authority and Resistance in Europe, 1400–1600 #**

Spring. 4 credits. S. Pohl.

A lecture course examining the political, cultural and social transformations between 1400 and 1600 through an exploration of aspects of state formation and ecclesiastical order, social and religious protest and deviant behavior. Important issues are the relationship between attempts of governments to impose order and the social practice of governing, questions of popular cooperation and resistance, and the role of the Church in this process. Specific topics to be covered include the Protestant Reformations and the emergence of confessional churches, law and crime, the peasant rebellions and the early modern witch hunts. Students will be introduced to primary works of this period, including literary and visual sources, and to major historiographical controversies.

**[HIST 284 The Age of Reform in Western Europe (1400–1600) #**

Fall. 4 credits. Not offered 1998–99.

An exploration of the efforts to reform church and society in the fifteenth and sixteenth centuries. Major topics include the strengths and weaknesses of the medieval church, the theological controversies among Lutherans, Calvinists, Anabaptists, and Roman Catholics, the social foundations of reforming and dissenting movements, and the success and failure of Protestant and Catholic Reformations.]

**[HIST 286 State and Society in the Iron Century (1560–1660) #**

Spring. 4 credits. Not offered 1998–99.

A survey of the conflicts which convulsed the continent of Western Europe between 1560 and 1660, focusing on the French Wars of Religion, the Dutch Revolt, the Thirty Years War, and peasant uprisings in France and Germany. The course will examine the sources and outcomes of conflict, the role of religion in politics, and the social impact of warfare. Particular emphasis will be placed on the capabilities and limitations of different state structures in mobilizing resources, waging war, and repressing dissent.]

**[HIST 349 Early Modern England #**

Fall. 4 credits. Not offered 1998-99.

R. Weil.

This course will explore the crises of political, religious, and epistemological authority that plagued England in the sixteenth and seventeenth centuries. We will examine the political and cultural impact of the Protestant Reformation, the nature of Tudor despotism and Stuart absolutism, the construction of a rhetoric of political dissent around issues of sexuality and corruption, competing understandings of the social order and social control, the Puritan Revolution and the invention of liberalism. Emphasis on close reading of contemporary sources, from autobiography and drama to political theory.]

**[HIST 350 The Italian Renaissance #**

Fall. 4 credits. Not offered 1998-99; next offered 1999-2000. J. Najemy.

An exploration of intellectual, cultural, religious, and political developments in Italy from the political thought of Dante and Marsilius in the age of the communes, through the several stages of Humanism from Petrarch to Alberti to Pico, down to the crisis of Italian liberty in the generation of Machiavelli, Guicciardini and Castiglione. The course will seek to problematize the notion of a "Renaissance" in the period's ambivalent attitudes toward history, politics, learning, culture, gender, language, and the role of intellectuals in politics and society. Emphasis will be placed on the close reading of primary sources and on issues of interpretation.]

**[HIST 351 Machiavelli #**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. J. Najemy.

This course will present Machiavelli in a variety of historical and interpretive contexts: European and Italian politics in the early sixteenth century; the decline of the Florentine republic and the rise of the Medicean principate; Machiavelli's own career in government and his, and the republic's, crisis in 1512-13; the intellectual traditions of Renaissance humanism, political thought, and the revival of antiquity; vernacular literary currents and popular culture; and the remarkable generation of political figures, writers, and theorists with whom Machiavelli associated and corresponded. Emphasis will be placed on a close reading of the major works (including the letters, *The Prince*, the *Discourses*, *Mandragola*, and selections from *The Art of War* and the *Florentine Histories*, all in translation) and a critical examination, in the light of that reading, of some major modern interpretations of Machiavelli.]

**[HIST 361 The Culture of the Renaissance I (also History of Art 350 and Comparative Literature 361) #**

Spring. 4 credits. Not offered 1998-99. J. Najemy, C. Lazzaro.

An interdisciplinary exploration of some major themes of Renaissance society and culture from the fourteenth to the sixteenth centuries. Using the perspectives of history, art history, and literature, the course will investigate the representation in primary texts and works of art (and with the aid of selected modern criticism) of Renaissance discourses of antiquity and authority, education and learning, republics and courts, politics, gender and family, love and eros, and cross-cultural encounters. Most of the attention will be to Italian history and culture, but with some comparisons to other European contexts.

Readings include selections from Petrarch, Boccaccio, Alberti, Machiavelli, More, Erasmus, and Vasari. Artists range from Ambrogio Lorenzetti to Mantegna, Durer, Titian, and others. Two lectures and a required discussion section each week. (Undergraduates must preregister for one of the sections.)]

**[HIST 364 The Culture of the Renaissance II (also Comparative Literature 362; English 325; Religious Studies 362; Music 390)**

Fall. 4 credits. Not offered 1998-99.

C. Kaske, W. Kennedy.

For description, see COM L 362.]

**[HIST 365 Medieval Culture, 400-1150 (also Religious Studies 365) #**

Fall. 4 credits. Prerequisite: History 263 or permission of instructor. Not offered 1998-99. J. J. John.

Intellectual and cultural developments in the age of monasticism, from St. Augustine and St. Benedict to St. Anselm and St. Bernard of Clairvaux.]

**[HIST 366 Medieval Culture, 1100-1300 (also Religious Studies 366) #**

Spring. 4 credits. Prerequisite: History 264 or permission of instructor. Not offered 1998-99; next offered 1999-00.

J. J. John.

The origin and development of the universities will be studied as background for a consideration of the scholastic mentality and its influence on the art, literature, philosophy, science, script, and theology of the period. Readings from Abelard, Hugh of St. Victor, Bonaventure, Thomas Aquinas, Dante, and others.]

**[HIST 368 Marriage and Sexuality in Medieval Europe (also Religious Studies 368, Women's Studies 368) #**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. P. Hyams.

Few topics generate heat so readily as gender relations and sexuality. Behind the current controversies lie decisions made in the first Christian centuries, and firmed up in the course of the Middle Ages; these still affect all of us, believers and unbelievers alike. This course studies Western attempts to deal with the problem of sexuality up to about 1500. The class will first clarify the church's normative rules of law and theology. Armed with this framework, it will then turn to more specific topics, including homosexuality, prostitution, rape/abduction and sexuality in medieval literature. The goal is to be able to compare the ideal model with the reality, and thus to assess the product the medieval church passed on to Western culture and ourselves. No formal prerequisite, though some prior knowledge of medieval European history is desirable.]

**[HIST 369 The History of Florence in the Time of the Republic, 1250-1530 #**

Spring. 4 credits. Not offered 1998-99.

J. Najemy.

Florentine politics and society from the communal period through the age of Dante, the rise and decline of the guild republic, the age of civic humanism, and the rise of the Medici to the crisis of the republic in the time of Machiavelli. Social conflicts, economic structures, guilds, family history, and political and historical ideas are considered in the context of the emergence and transformation of republican government.]

**[HIST 377 Gender in Early Modern Europe (also Women's Studies) #**

Spring. 4 credits. Enrollment limited to 30. Not offered 1998-99. R. Weil.

An inquiry into how masculinity and femininity were defined in early modern Europe. Questions to be explored include: What purpose did gender distinctions serve in this particular society? To what extent were men and women able to shape and redefine the meaning of their gender? How was their ability to do so affected by such events as the Reformation and the French Revolution?

**[HIST 405 Population and History**

Not offered 1998-99. S. Kaplan.

For description, see Comparative History.]

**[HIST 408 Feudalism and Chivalry: Secular Culture in Medieval France, 1000-1300 #**

Fall. 4 credits. No prerequisites; History 263 or 264 would help. P. Hyams.

An upper-level seminar on the main currents of noble lay culture in France, which led European fashions in love, warfare, entertainment, and environment through most of the period. There will be heavy emphasis on contemporary sources (in English), including lively and complete readings from epic literature (the Song of Roland), lives, and chronicles.

**[HIST 409 Seminar on Work in Europe and America**

Fall. 4 credits. S. Kaplan.

For description see Comparative History.]

**[HIST 427 Power and Society in Early Medieval Europe and Japan**

Spring. 4 credits. Prerequisite: a course in medieval European or Japanese historical studies, or permission of instructor. Not offered 1998-99. P. Hyams and J. Piggott.

This seminar will focus on structures, processes, and practices of society in early medieval Europe and Japan. It will provide a forum for discussion of the ways in which, in some very different societies, Europeans and Japanese handled power. We will also be interested in comparing historiographical methodologies employed and issues considered by historians of these societies.

The nature of power and authority and characteristic organizational practices, including kingship, land tenure, status systems, and religious and military structures; the formation of ideology through art, ritual, literature, and law; and various means of linking center and periphery in these societies will be topics for discussion.]

**[HIST 436 Conflict Resolution in Medieval Europe #**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. P. Hyams.

This seminar concentrates on a time (late 9th-13th centuries) when much of Europe lacked formal systems of justice, and so handled questions of social control quite largely by extra-legal means. Its subject is in one sense political history upside-down, as viewed by individuals rather than their rulers. We examine ways in which anthropology and some recent approaches to law can assist: the readings will be partly anthropology, partly translated medieval accounts of actual conflicts, with samples of recent interpretation. The topics covered should be of interest to law students and majors in anthropology and other modern social sciences.]



**[HIST 443 Gifts, Commodities and Alliances: Historical Perspective on Exchange]**

Spring. 4 credits. Not offered 1998–99. Almost all forms of social interaction are predicated on some type of exchange, whether equal or unequal, voluntary or coerced, real or fictive. This course is an exploration of the varieties of exchange. Readings will combine classic theoretical treatment (Marx, Mauss, Goody and others) with historical monographs from both the Western and non-Western worlds, as well as contemporary literature in economic anthropology. The main themes of the course will be the social corollaries of exchange and the homologies between material and immaterial modes of exchange.]

**[HIST 446 Law, Crime and Society in Europe, 1400–1700]**

Spring. 4 credits. Prerequisite: permission of instructor. S. Pohl. This comparative study focuses on Germany, England, France, and Italy and concentrates mainly on the social and legal treatment of crimes of violence. Throughout the course, we shall consider the differences and similarities between English common law and continental legal systems. Major issues to be covered include the role of criminal justice, the fate of customary methods of conflict resolution in a time of increasing legal centralization, and the relationship between cultural and legal change. We shall approach these issues by examining, among other things, the development of criminal procedure, the role of lawyers, contested notions of criminal responsibility, and the self-presentation of defendants. The course emphasizes close readings of primary works, including trial documents and literary sources.

**[HIST 447 Crusaders and Chroniclers]**

Fall. 4 credits. Not offered 1998–99; next offered 2000–01. P. Hyams. An intensive reading seminar offering a natural progression from History 259 *The Crusades*. It will examine contemporary accounts of the crusading movement in English translation. The twin goals are to follow select themes of crusading history to a deeper level than is possible in History 259 and to study medieval historiography through whole chronicles and other primary sources.]

**[HIST 451 Lord and Peasant in Europe: A Seminar in Social History #]**

Not offered 1998–99. S. L. Kaplan. Spring. 4 credits. Not offered 1998–99. J. Najemy.]

**[HIST 472 Politics and Culture in 18th-Century England #]**

Spring. 4 credits. Not offered 1998–99. R. Weil. Between 1660 and 1800 England experienced imperial and economic expansion, the Enlightenment, and the threat of Revolution abroad and at home. How in this context did people interpret and imagine the nature of the social order, political authority, and the family? We will consider the changing and fiercely contested notions of property, politeness, crime and punishment, sexuality, Empire, slavery and the market.]

**[HIST 481 The English Revolution #]**

Spring. 4 credits. Not offered 1998–99. R. Weil. Between 1640 and 1660, England experienced two decades of civil war and revolution and embarked on a fascinating series of attempts to reorganize political and religious life. Women and the lower classes emerged as actors on the political stage, radical religious sects flourished, and the nature of authority was questioned in both the family and the state. This course will explore the political, cultural, religious and social dimensions of the English Revolution, using mostly primary sources.]

**[HIST 487 Household and Family in Late Medieval and Early Modern Europe #]**

Fall. 4 credits. Not offered 1998–99. What was the pre-modern household? Was it an economic unit, a residential entity, a legal construct, an emotional body, or a patriarchal tool? This seminar is an introduction to the methodologies and controversies of current historical research on the European household and family. Topics will include the nature of kinship, property rights and inheritance customs, variation in household structure, the economic context and demographic implications of household formation patterns, and power relations inside and outside of the household.]

**[HIST 496 Theorizing the Public Sphere (also Comparative Literature 496 and German Studies 496)]**

Fall. 4 credits. Not offered 1998–99. P. Hohendahl. For description, see GERST 496.]

**[HIST 651 Old English Literature in Its Historical Context (also English 710)]**

Spring. 4 credits. Not offered 1998–99. P. Hyams, T. D. Hill. This graduate course, cross-listed with English 710, might equally be known as "Anglo-Saxon England: History and Literary Context." It studies the written sources for major questions of Anglo-Saxon history in their literary and cultural context. It concentrates on important texts extant in both Latin and Old English. Comparison can illuminate the resources and intentions of writers, compilers, and copyists, the literary and linguistic culture of England, and the ways in which historians might most fruitfully study such texts. Bede's *Ecclesiastical History*, and *Battle of Maldon* and Aelfric's *Colloquies*, and selections from the Anglo-Saxon chronicle, *Beowulf*, laws, homilies and wisdom literature are all likely to come under scrutiny. One goal is to reclaim for European religious history a corpus of material that historians neglect because it is in Old English.]

**[HIST 653 England—Britain—Europe in the Middle Ages]**

Fall. 4 credits. Not offered 1998–99. P. Hyams. This graduate seminar tentatively explores the coming move from the study of medieval English history to that of the British Isles and its inhabitants within the wider context of Europe and Western Christendom. Readings will mostly be representative original sources. The precise texts and topics studied will depend on the interests (and especially future teaching plans) of participants, but will certainly allow for a critical examination of existing literature on the general and cultural history of England, Scotland, Ireland and Wales.]

**[HIST 663 Graduate Seminar in Renaissance History]**

Spring. 4 credits. Open to undergraduates with permission of instructor. Not offered 1998–99. J. Najemy.]

**[HIST 664–665 Seminar in Latin Paleography]**

664, fall; 665, spring. 4 credits each term. Hours to be arranged. J. J. John.

**[HIST 666 Seminar in Medieval History]**

Fall. 4 credits. Not offered 1998–99. J. J. John.]

**[HIST 669 Politics, Power, and Culture in Early Modern England]**

Fall. 4 credits. Not offered 1998–99. R. Weil. An inquiry into how the ruling class ruled, and what that meant to and for everyone else. Topics include: the invention of the "state," the relationship of central and local power, clientage and corruption, the construction of categories of "public" and "private," representations of monarchy, hegemony and resistance, court culture, the social interpretations of the English Revolution and their critics. Focus is on historiography and methodology, with some engagement with primary sources.]

**[HIST 686 Licit and Illicit Violence in the Sixteenth and Seventeenth Centuries]**

Spring. 4 credits. Not offered 1998–99. An inquiry into the varieties of violence in early modern Europe. We will examine both those forms of violence which the authorities prohibited (murder, rioting, tyrannicide, the feud) and those forms which they themselves employed (warfare, inquisition, execution). We will also examine less overt forms of violence which though "merely" psychic (black magic) or even spurious (the myth of Jewish ritual murder) powerfully influenced the lives of everyday women and men. The central themes of the seminar are the technologies and legitimization of violence—how, why, against and for whom violence was justified and exercised.]

**Modern European History****[HIST 152 Introduction to Western Civilization (1600 to the end of World War II) #]**

Spring. 4 credits. R. L. Moore and M. Steinberg. This course offers a comparative perspective on the development of modern states, societies, and cultures in Europe and North America. Religious and Scientific Revolutions in early modern Europe; European expansion and conquest; Enlightenment and Revolution; liberalism, capitalism, and communism; the politics of race, slavery, and the new imperialism; the World Wars and the Holocaust; the Cold War; the modern and the post-modern in European and American culture.

**[HIST 217 Seminar: Totalitarianism]**

Spring. 4 credits. Not offered 1998–99. P. Holquist. One of the distinguishing features of the twentieth century is the rise of a qualitatively new political project, one that produced massive violence and fundamentally reordered the societies it operated upon. Totalitarianism seeks to explain these developments as related to the emergence of a certain political ethos and the development of particular state

tools. This seminar will first examine totalitarianism as a concept through a reading of classic studies on this phenomenon, and then test the concept's applicability in a range of case studies (especially Stalinist Russian and Nazi Germany, but including also Fascist Italy and Maoist China) and see how it operated in a variety of spheres (aesthetics, politics, economic policies, state measures for the population, repressive policies). This course is designed primarily for sophomores, to acquaint them with historical issues and methodologies and to develop their writing abilities.]

**HIST 220 The French Experience: An Introduction (also French Literature 224)**

Fall. 3 credits. S. Kaplan and M. Greenberg.

An examination of French society culture and institutions. What has made French culture so distinctive? Its literature and its revolutions, its gastronomy and fashion, its painting, cathedrals and cinemas. Looking attentively at texts, images and contexts from selected moments in the seventeenth, eighteenth, nineteenth, and twentieth centuries, we will attempt to unravel some of the defining enigmas of the French experience. Two lectures/week in English and one section (one section conducted in English, one in French). Readings available both in French and English translation.

**HIST 223 Seminar in Modern European Political History**

Fall. 4 credits. Seminar designed for underclassmen but open to all students. Enrollment limited to 15 students. Prerequisite: permission of instructor. J. Weiss.

Topic for 1998: the crimes of World War II and the pursuit of justice. An examination of attempts to understand genocide and war crimes in World War II, to punish the perpetrators, to compensate the victims, and to establish new courts and new principles. Special attention to the Nuremberg Trials.

**HIST 252 Russian History to 1800 #**

Fall. 4 credits. W. Pintner.

The origin and development of the fundamental social, political, economic, and cultural institutions that have determined the nature of contemporary Russian society.

**HIST 267 History of Zionism and the Birth of Israel (also Jewish Studies 290; Near Eastern Studies 290)**

Spring. 4 credits. V. Caron.

This course will examine the history of Zionism as an ideology and political movement from its origins in the nineteenth century to the present. Attention will be paid to situating Zionism within the context of modern Jewish, European, and Middle Eastern History. Topics will include: the ideological foundations of Zionism; the role of Theodor Herzl and the rise of political Zionism; the Balfour Declaration; the development of the Yishuv; Zionism as a cultural identity for Diaspora Jewry; the British mandate; the Arab-Zionist encounter; Zionist responses to the Holocaust; and Zionism and contemporary Israeli society.

**HIST 283 Europe in the Technological Age**

Spring. 4 credits. J. Weiss.

An introduction to politics, culture, and technology in contemporary Europe. In the

sections on politics a survey of party systems and their interactions with social movements is followed by examinations of post-Communist constitution and political structures, the New Germany, and the European Union. The section on European culture pays special attention to the European press and electronic media as shapers and reflectors of cultural values. A section on the struggle over the control of the past deals with tensions and conflicts in European national memories. In the section on Nationalism and ethnicity, political and cultural approaches are combined in consideration of the wars in former Yugoslavia as well as less violent conflicts between nationalists and members of ethnic minorities elsewhere in Europe. The section on technology deals with the design of products and processes as a cultural phenomenon, making cross-national comparisons of some of the social, cultural, and institutional influences on engineering performance.

**HIST 285 From Medievalism to Modernity: The History of Jews in Early Modern Europe, 1492-1789 (also Near Eastern Studies 245; Jewish Studies 253) #**

Fall. 4 credits. V. Caron.

This course will examine the history of European Jewry during the centuries of transition from the Middle Ages to the Modern Era. We will examine the extent to which traditional Jewish life began to break down during this period and thus paved the way for the emergence of modern Jewry. Topics will include: the impact of the Spanish Expulsion of 1492; religious, intellectual, and socio-economic dimensions of the Marrano dispersion, including Lurianic Kabbalah and the messianic movement of Shabbetai Zevi; the establishment of Jewish communities in the West; the end of the "Golden Age" of Polish Jewry and the rise of Hasidism; the changing economic and political role of Jews in the 17th and 18th centuries; and the impact of the Enlightenment.

**HIST 290 Twentieth-Century Russia and the Soviet Union**

Spring. 4 credits. P. Holquist.

An introductory lecture course spanning the lifetime of the USSR (1917-1991), but covering the last years of the Russian Empire and the first years of the post-communist present as well. Geographically, it focuses on the Russian heartland and the non-Russian areas of the Soviet Union. The course will explore the roots and consequences of the Russian Revolution; the nature and evolution of Leninism, Stalinism and Soviet communism; the entrenchment of reform of the post-Stalinist system; and the legacy of communism for the region's new regimes. Students are introduced to a wide variety of historical materials, including documents, essays, memoirs, literature and film.

**[HIST 291 Modern European Jewish History, 1789-1948 (also Jewish Studies 252)]**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. V. Caron.

Jewish life in Europe experienced a profound transformation as a result of the process of Jewish emancipation which began at the end of the eighteenth century. While emancipation offered Jews unprecedented social, economic and political opportunities, it also posed serious challenges to traditional Jewish life and values by making available new avenues of integration. This course will

examine the ways in which Jewish and non-Jewish society responded to these new developments from the eighteenth century Enlightenment to the post-World War II era. Topics will include Jewish responses to emancipation, including assimilation and new varieties of religious accommodation; the development of modern antisemitism; the rise of Zionism and the creation of the state of Israel; the modernization of Eastern European Jewry; the impact of mass immigration; and the Nazi era.]

**[HIST 353 Nineteenth-Century European Intellectual History #**

Fall. 4 credits. Not offered 1998-99.

D. LaCapra.

The focus is on social and cultural thought in France, Germany, and England. Topics include reactions to the French Revolution and industrialization; the definition of conservative, liberal, and radical perspectives; and the relation between literature and social thought. Readings include Tocqueville, Mill, Hegel, Marx, Flaubert, Dostoevsky, Nietzsche, and Durkheim.]

**[HIST 354 Twentieth-Century European Intellectual History (also Comparative Literature 340)]**

Fall. 4 credits. Not offered 1998-99.

D. LaCapra.

This course examines significant currents in twentieth-century thought in France, Germany, and England. Topics include the varieties of existentialism, the development of the social sciences, psychoanalysis, the modern novel, structuralism, and poststructuralism. Readings include Weber, Freud, Heidegger, Sartre, Camus, Woolf, Foucault, and Derrida.]

**[HIST 355 The Old Regime: France in the Seventeenth and Eighteenth Centuries #**

4 credits. Not offered 1998-99. S. Kaplan.

A systematic examination of the social structure, economic life, political organization, and collective mentalities of a society that eclipsed all others in its time and then, brutally and irreversibly, began to age. France, in European perspective, from the wars of religion through the age of Voltaire.]

**HIST 356 The Era of the French Revolution and Napoleon #**

Spring. 4 credits. S. Kaplan.

A study of the failure of the traditional system, its dismantling and replacement in France, and the international consequences. Focus will be on the meaning of the revolutionary experience, the tension between the desires to destroy and to create, and the implications of the Revolution for the modern world.

**[HIST 357 Survey of German History, 1648-1890 #**

Fall. 4 credits. Open to freshmen with permission of instructor. Not offered 1998-99; next offered fall 1999. I. Hull.

An examination of the social, political, intellectual, and diplomatic history of the German states from the devastation of the Thirty Years' War, through absolutism, the bourgeois revolutions of 1848, the struggle for unification, to the beginning of the modern industrial state.]

**[HIST 358 Survey of German History, 1890 to the Present**

Spring. 4 credits. Open to freshmen with permission of instructor. Not offered 1998-99; next offered spring 2000. I. Hull.

An examination of the "German problem," that is the political, cultural, economic and other causes of modern Germany's extreme violence and volatility from 1890 through 1945, and of the consequences thereof on the divided Germany of 1945 to 1989, and on the new German state since 1989.]

**[HIST 362 European Cultural History, 1750-1870 (also Comparative Literature 352) #**

Spring. 4 credits. Not offered 1998-99. M. Steinberg.

The course will focus on the making of middle-class culture, society, and imagination from the Enlightenment through the French Second Empire. There will be three units with national and thematic foci: Germany in the period of Enlightenment, emancipation, and the burgeoning of national consciousness; questions of law, property, gender, and sexuality in early 19th-century England; modernism and urbanism in Second Empire France. Primary readings (including novels, paintings, and operas) will be considered along with contemporary historical and theoretical readings.]

**HIST 363 European Cultural History, 1870-1945 (also Comparative Literature 353)**

Fall. 4 credits. M. Steinberg.

This course will focus on problems of modernity, identity, and ideology in comparative European contexts. We will address the politics and culture of German nationalism, French urbanism and religious revival, the cultural origins of psychoanalysis, technological culture (including film), and the cultural origins and dynamics of fascism. As in 362, primary materials (including Wagner, Nietzsche, George Eliot, Freud, Benjamin and Alfred Hitchcock) will be considered along with recent theoretical work.

**HIST 370 History of the Holocaust (also Jewish Studies 353)**

Fall. 4 credits. Each student must enroll in a section. V. Caron.

This course will analyze the meaning of the Holocaust from three vantage points: that of European history; that of Jewish history; and that of those states and religious institutions that shared responsibility by having stood by in silence. Topics include: the evolution of modern anti-semitism; the role of anti-semitism in the Nazi ideology and program; the bureaucratization of death; Jewish life in ghettos and concentration camps; the fate of Jews in occupied Europe and the question of collaboration; Jewish political behavior under duress; the responses of the Western allies and the Churches; contemporary interpretations of the Holocaust and the meaning of evil.

**HIST 379 The First World War: Causes, Conduct, Consequences**

Fall. 4 credits. Open to freshmen with permission of instructor. P. Holquist and I. Hull.

This course examines the longterm and immediate political, social, and cultural causes of World War I, its catastrophic prosecution, and its revolutionary consequences. Recurring themes are: the building of nation-states, the diplomatic and military systems of the nineteenth and twentieth centuries, mass mobilization, the development of mass violence, and the emergence of millenarian visions of the future.

**[HIST 380 Social History of Western Technology**

Spring. 4 credits. Not offered 1998-99. J. Weiss.

For description see History of Science.]

**HIST 383 Europe, 1900-1945**

Spring. 4 credits. J. Weiss.

An investigation of the major developments in European politics between 1900 and the end of the Second World War. Emphasis on the rise and fall of democratic political systems and their alternatives. Topics include the reorientation of liberalism and socialism, the transforming effects of war and depression, the dynamics and diplomacy of fascism, the European response to the economic and ideological influence of America and the Soviet Union, the changes in Eastern Europe during the interwar years, and the interaction between politics and social structure.

**[HIST 384 Europe, 1945-1968**

Spring. 4 credits. Not offered 1998-99. J. Weiss.

A political and social history of Europe between the fall of fascism and the political crises of 1968. Emphasis on the comparative study of the elaboration of democratic institutions and ideologies. Topics include the origins and course of the Cold War in Western and Eastern Europe, Gaullism and Christian Democracy, the emergence of welfare states, liberal-democratic and Communist culture, the end of colonial empires in the West, opposition movements in Eastern Europe, and the general upheaval of 1968.]

**HIST 385 Europe in 20th Century: 1968-1990**

Fall. 4 credits. J. Weiss.

The major political developments in Europe between the upheavals of 1968 and the collapse of Communist regimes. Topics will include the effects of economic turndown in 1973-1974; the response to terrorism; regionalist movements; new ethnic minorities and their opponents; Socialist governments in southern Europe; the arrival of democracy in Spain, Portugal, and Greece; new dynamics in the European Community; the rise of Thatcherism; the war scare of the 1980s; and the final phase of the Cold War.

**[HIST 405 Population and History**

4 credits. Not offered 1998-99. S. Kaplan. For description, see Comparative History.]

**[HIST 406 The People in the French Revolution #**

Fall. 4 credits. Not offered 1998-99. S. Kaplan.

The Revolution was nothing if not a mass event. Mass action played a critical part in shaping its course. The "re-invention" of France affected the population down to each village and demanded decisions from virtually every adult. This course will focus on the people as actors: their collective memory, their ideologies, their repertoire of intervention, the formation of a popular political culture. It will examine the encounters between the people (in their multiple incarnations) and the revolutionary elites who sought to articulate and appropriate the Revolution. A major theme will be the tension between the ambitions to achieve liberty and equality.]

**HIST 409 Seminar on Work in Europe and America**

Fall. 4 credits. S. L. Kaplan. For description see Comparative History.

**HIST 417 History of Jews in Modern France (also Jewish Studies 448; French Literature 413)**

Spring. 4 credits. Prerequisite: permission of instructor. V. Caron.

This course will explore the integration of Jews into French society from the French Revolution to the present. Topics will include: the debate over Jewish emancipation during the Enlightenment, the French Revolution, and the Napoleonic era; the processes of religious and social assimilation; the rise of antisemitism and the Dreyfus Affair; Jewish responses to antisemitism; the immigrant challenge and refugee crisis of the 1930s; the Vichy era and Jewish resistance during World War II, and the reconstruction of the French Jewish community since 1945.

**[HIST 435 Collective Action and Politics in Modern Europe**

Not offered 1998-99. S. Kaplan, S. Tarrow. For description, see GOVT 435.]

**[HIST 441 Seminar in the European Enlightenment #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. Semester/TBA. I. Hull.]

**[HIST 451 Lord and Peasant in Europe: A Seminar in Social History #**

4 credits. Not offered 1998-99. S. L. Kaplan.]

**[HIST 456 Seminar in European Cultural History**

Spring. 4 credits. Not offered 1998-99. M. Steinberg.]

**[HIST 457 Seminar in European Fascism**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. Semester/TBA. I. Hull.]

**[HIST 459 Antisemitism and the Crisis of Modernity: From the Enlightenment to the Holocaust (also Jewish Studies 454)**

Spring. 4 credits. Not offered 1998-99; next offered 1999-2000. V. Caron.

This course will examine the role of antisemitism in nineteenth and twentieth century European ideological, political and socioeconomic developments. Attention will be paid to the way in which antisemitism illuminates the underside of European history, allowing us to see how anti-Jewish intolerance and prejudice become embedded in the worldviews of significant sectors of the European population, culminating in the Holocaust. Topics will include: the Christian roots of antisemitism and the extent to which modern antisemitism marks a break with the medieval past; the politicization of antisemitism by both Left and Right; the role of antisemitism in socioeconomic conflicts linked to the rise of capitalism; Jewish responses to antisemitism; antisemitism in the Nazi and Fascist revolutions; and contemporary interpretations of antisemitism.]

**HIST 462 Popular Culture in European History**

Spring. 4 credits. S. L. Kaplan.

An examination of the origins, practices and meanings of popular culture throughout Europe from the Middle Ages to the era of the French Revolution. After considering the various ways in which "culture" and "popular" can be construed, the seminar will focus on the specific manifestations of popular culture, its various languages and gestures, and its complex relations with the dominant/elite cultures.

**[HIST 467 Seminar in Modern European Political History]**

Spring. 4 credits. Not offered 1998-99.  
Permission of the instructor required.  
J. Weiss.]

**[HIST 474 Topics in Modern European Intellectual History]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
D. LaCapra.]

**[HIST 476 Social and Cultural History of Contemporary Europe]**

Fall. 4 credits. Not offered 1998-99.  
J. Weiss.

The "other Europe": language, culture, and nation among the minority peoples of Europe. A comparative investigation of the development of the cultural and historical identity of non-dominant European ethnic groups and their relation to the formation and policies of European national states: the Basques, the Welsh, the Catalans, the Bretons, the Occitans, the Gaelic Irish, the Faroese, the Gypsies, the Romansh, and others. The course will combine historical, literary, and sociolinguistic approaches.]

**[HIST 477 Seminar on the Politics of the Enlightenment #]**

Spring. 4 credits. Not offered 1998-99.  
S. Kaplan.

An inquiry into the historical origins of European (especially French) political, social, and economic thought, beginning in the 1680s, at the zenith of Louis XIV's absolutism, and culminating in the French Revolution a century later. Emphasis is on the relation of criticism and theory to actual social, economic, religious, and political conditions. An effort is made to assess the impact of enlightened thought on the eighteenth-century world and to weigh its implications for modern political discourse. Readings in translation from such authors as Bayle, Montesquieu, Voltaire, Rousseau, Diderot, and others as well as from modern scholarly and polemical literature.]

**[HIST 478 Stalinism As Civilization]**

Spring. 4 credits. Not offered 1998-99.  
P. Holquist.

The collapse of the Soviet Union provides an opportunity to reconsider the entire Stalinist experience, both on the basis of newly accessible documents and from fresh perspectives. This course approaches Stalinism as an entire system, examining the links between high politics, foreign relations, culture and everyday political strategies. Readings will include historical studies as well as newly available primary materials. Knowledge of Russian not required.]

**[HIST 488 Seminar in Late Nineteenth-Century European Imperialism]**

Spring. 4 credits. Prerequisite: permission of instructor. I. Hull.

This seminar examines the theories of the "second wave" of European imperialism, and then compares the imperial experiences of Great Britain, France, and Germany. It focuses on the imperialist powers, and on the (often unintended) consequences of their colonial involvement on them. Of special concern are the transformation of nationalism into imperialism, and the effects on the European powers themselves of their experiences of applied racism and the commission of mass violence in their colonies.

**[HIST 490 Empire, State, and Nation in Russian and Soviet History]**

Fall. 4 credits. Not offered 1998-99.  
P. Holquist.

The Russian Empire represented a distinct type of empire, and the USSR provided a specific paradigm of nation-building. Among the topics treated in this course: how the heterogeneous Russian Empire was conceived and administered; the emergence of competing models of political organization (ethno-nationalism; federalism; pan-Islamic and pan-Turkic movements); the USSR's attempts to reintegrate many former areas of the Empire, and the consequences of such Soviet policies, both in the life of the USSR and their legacy for post-communist states. Readings will include historical treatments as well as theoretical readings on forms of political organization.]

**[HIST 605 Graduate Seminar in European Cultural and Intellectual History]**

Fall. 4 credits. M. Steinberg.

In 1998 the seminar will function as a companion course to History 363. Admission is open to graduate students and, by application to the instructor, to seniors. All participants will be required to attend the lectures in History 363. The seminar readings will focus on the primary readings in History 363 (Nietzsche, Wagner, Eliot, Freud) and will add to them literary and theoretical texts on the themes of subjectivity, ideology, and psychoanalysis.

**[HIST 635 The Gates to Modernity: From Karlsbad to the 1848 Revolution (also German Studies 635)]**

4 credits. Anchor course. Not offered 1998-99. P. Hohendahl.

For description, see GER ST 635.]

**[HIST 661 Graduate Seminar in Twentieth-Century German History]**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. Semester/TBA. I. Hull.]

**[HIST 672 Seminar in European Intellectual History]**

Fall. 4 credits. Not offered 1998-99.  
D. LaCapra.]

**[HIST 673 Seminar in European Intellectual History]**

Spring. 4 credits. Not offered 1998-99.  
D. LaCapra.]

**[HIST 674 Graduate Seminar in German History, 1770-1918]**

Fall. 4 credits. Not offered 1998-99.  
Semester, TBA. I. Hull.]

**[HIST 675 After the Divide: German Critical Theory of the Seventies and Eighties (also Comparative Literature 675 and German Studies 675)]**

Fall. 4 credits. Not offered 1998-99.  
P. Hohendahl.

For description, see GER ST 675.]

**[HIST 678 Seminar in Modern European Social History]**

Spring. 4 credits. Permission of instructor required. Not offered 1998-99. J. Weiss.]

**[HIST 750 European History Colloquium]**

Fall and spring. 4 credits, each term.  
Kaplan, Holquist (fall); Kaplan, Weiss (spring).

A research colloquium designed for European history graduate students. The colloquium

will offer a forum for students to present papers and to discuss the work of visiting scholars.

**Honors and Research Courses**

Note: History 301-302 are not regular courses for which students may sign up at will. They are personal arrangements between an instructor and a particular student. Students must first gain the consent of a particular instructor to work with them.

**HIST 301 Supervised Reading**

Fall or spring. 2 credits. Open only to upperclass students. Prerequisite: permission of instructor. Staff.

**HIST 302 Supervised Research**

Fall or spring. 3 or 4 credits. Open only to upperclass students. Prerequisite: permission of instructor. Staff.

**HIST 400 Honors Proseminar**

Fall. 4 credits. Limited to 12 students. For prospective honors candidates in history. Prerequisite: permission of a member of the Honors Committee is required to register. M. Kammen.

An exploration of major approaches to historical inquiry, analysis, and presentation. Ways of thinking about history along with research methods and organization of the results will be considered by reading and discussing a variety of historical works. Substantive readings will be drawn from several time periods and diverse culture areas. There will be one paper during the semester, and a longer final paper which explores the work of a major historian or school of historical writing.

**HIST 401 Honors Guidance**

Fall or spring. 4 credits. Prerequisites: History 400 and permission of instructor. Staff.

**HIST 402 Honors Research**

Fall or spring. 4 credits. Prerequisites: History 400 and permission of instructor. Staff.

**HIST 703-704 Supervised Reading**

703, fall; 704, spring. 4 credits each term. Limited to graduate students. Prerequisite: permission of instructor. Staff.

**HIST 709 Introduction to the Graduate Study of History**

Fall. 4 credits. Required of all first-year graduate students. T. Borstelmann, J. V. Koschmann.

The course is designed to introduce entering graduate students to crucial issues and problems in historiography that cut across various areas of specialization.

**HISTORY OF ART**

L. L. Meixner, chair; R. G. Calkins, director of graduate studies; J. E. Bernstock, director of undergraduate studies; K. Barzman, P. I. Kuniholm, C. Lazzaro, K. McGowan, A. Pan, A. Ramage, S. Reiss

The Department of the History of Art provides a broad range of introductory and advanced courses in Western (European and American) and non-Western art (East and Southeast Asian, African), from antiquity to the present.



## The Major

Department majors acquire a broad understanding of the history of art in several chronological and geographical areas: ancient, medieval, Renaissance, Baroque, modern (Europe and U.S.A.), Southeast Asia, China, Japan, and Africa. Additionally, majors practice a range of art historical methods and interpretive strategies, including connoisseurship, dendrochronology, feminism, iconography, semiotics, and social history. Majors are encouraged to locate the history of art within allied humanities fields and the applied arts by taking course in history, literature, history of architecture, and fine arts. The study of foreign languages is encouraged strongly.

## Requirements for the Major

Prospective majors should consult the director of undergraduate studies. Students wishing to major in the history of art should complete two courses at Cornell in the department by the end of their sophomore year. One of the two courses required for entry into the major must be at the 200-level, and one must emphasize material either predominantly before 1800 or outside Europe/U.S.A. These two courses are prerequisites for the major and may be counted toward fulfillment of the major requirements. The major in the history of art requires 44 credits, 30 at the 300-level or above. The core requirements: requires proseminar; one 400-level area seminar; two courses in art outside Europe/U.S.A.; three courses in art predating 1800 (ancient, medieval, or Renaissance/Baroque). Majors must choose at least two courses from different categories. In addition to the 44 credits, majors are required to take two courses, approved by their advisers, in areas related to the history of art.

## Honors

To become a candidate for the degree of Bachelor of Arts with honors in the history of art, a student must have a cumulative average of B+ for all courses taken in the department and in all arts and sciences courses. Application to write an honors thesis should be made to the director of undergraduate studies during the second term of the junior year. The application must include a summary of the proposed project, an endorsement by a faculty sponsor, and a copy of the student's transcript. In the senior year the honors candidate will include in his/her course load, History of Art 600 and 601. These courses address the research and writing of the senior thesis under the direction of the student's project adviser.

## Course Numbering System

100-level courses are all freshman writing seminars.

200-level courses are introductions to the major subdivisions of Western art and art outside the West.

300-level courses are more specialized, and some have the introductory course in the appropriate area as a prerequisite. Freshmen are advised to take the introductory courses unless they already have substantial background in the history of art.

400-level courses are seminars primarily for advanced undergraduates and graduate students.

500-level courses are seminars primarily for graduate students.

## Freshman Writing Seminars

For Freshman Writing Seminar offerings in the History of Art, see the John S. Knight Writing Program's special brochure. These courses may be used as freshman electives but not to satisfy the distribution requirement.

## Courses

### ART H 202 Survey of European Art: Renaissance to Modern #

Summer only. 3 credits. Staff.

The major traditions and movements in western European art from the Renaissance to the Modern period. Painting, sculpture, and architecture with an emphasis on painting.

### ART H 220 Introduction to Art History: The Classical World (also Classics 220) #

Fall. 4 credits. Each student must enroll in a section. J. Coleman.

An overview of the art and archaeology of the Greek and Roman world. The sculpture, vase painting, and architecture of the ancient Greeks from the Geometric period through the Hellenistic, and the art of the Romans from the early Republic to the time of Constantine the Great.

### ART H 221 Minoan-Mycenaean Art and Archaeology (also Classics 221 and Archaeology 221) #

Spring. 3 credits. J. Coleman.

For description, see Classics 221.

### [ART H 224 Archaeology in Action I (also Classics 232 and Archaeology 232) #

3 credits. Prerequisite: permission of instructor. Not offered 1998-99.

P. I. Kuniholm.]

### ART H 225 Archaeology in Action II (also Classics 233 and Archaeology 233) #

Spring. 3 credits. Prerequisite: permission of instructor. P. I. Kuniholm.

Objects from the Classical, Hellenistic, and Roman periods are "dug" out of Cornell basements, identified, cleaned, restored, catalogued, and photographed and are considered in their appropriate historic, artistic, and cultural contexts.

### ART H 230 Introduction to Art History: Monuments of Medieval Art (also Religious Studies 230) #

Spring. 4 credits. Each student must enroll in a section. R. G. Calkins.

An introduction to the approaches to art history through a study of selected works of art from the Middle Ages: architecture, sculpture, painting, manuscript illumination, metalwork, and ivory.

### ART H 245 Introduction to Art History: Renaissance and Baroque Art #

Fall. 4 credits. Each student must enroll in a section. K. Barzman.

A survey of major works of European painting, sculpture, and architecture from 1400 to 1700. The focus is on preeminent artists, workshop methods, style, meaning, patronage, and the function of art in a range of social contexts. The course also covers the methods of art history currently practiced in Renaissance and Baroque studies. Weekly section meetings are required.

### ART H 260 Introduction to Art History: The Modern Era

Spring. 4 credits. Not open to students who have taken History of Art 261. Each student must enroll in a section. J. E. Bernstock.

A discussion of the most important developments in art from 1780 to the present. The emphasis is on major movements and artists such as Romanticism (Delacroix), Realism (Courbet), Impressionism (Monet), Post-Impressionism (van Gogh), Cubism (Picasso), Fauvism (Matisse), Surrealism (Miro), Abstract Expressionism (Pollock), and Pop Art (Warhol).

### ART H 261 Introduction to Art History: Modern Art

Summer only. 3 credits. Staff.

An introduction to early modern art as it developed between the French Revolution and World War I. Both European and American movements are examined, including Romanticism, Impressionism, and Cubism. Units are organized around central figures such as Mary Cassatt, Edgar Degas, Thomas Eakins, and Vincent van Gogh. Lectures are supplemented with discussions of methods of inquiry, including social history and feminism, fundamental to interpreting works of art.

### ART H 280 Introduction to Art History: Approaches to Asian Art @ #

Fall. 3 credits. K. McGowan.

Arranged according to selective focus and emphasis rather than broad chronological survey, this course introduces students to the varied responses of the Asian artist in diverse social, geographical and historical contexts. Indian miniature paintings, Japanese prints, high-fired ceramics from Thailand and Vietnam, Indonesian textiles and jewelry, Javanese shadow-puppet theater, and Balinese ritual and performance traditions will be explored. A number of class sessions will meet in the Herbert F. Johnson Museum of Art.

### ART H 309 Dendrochronology of the Aegean (also Classics 309 and Archaeology 309)

Fall and spring. 4 credits. Prerequisite: permission of instructor. Limited to 10 students. P. I. Kuniholm.

Participation in a research project of dating modern and ancient tree-ring samples from the Aegean and Mediterranean. Supervised reading and laboratory work. A possibility exists for summer fieldwork in Greece and Turkey.

### ART H 319 Art in the Daily Life of Greece and Rome (also Classics 319) #

Spring. 4 credits. A. Ramage.

Classical art is well reflected in the small items of daily life that are neglected frequently in the standard histories. This course looks at the making and decorating of household items in Greece and Rome in a variety of materials from clay to metal. The links between the commissions of the state and the tastes of the people are examined through their material culture.

### [ART H 320 The Archaeology of Classical Greece (also Classics 320) #

4 credits. Not offered 1998-99.

A. Ramage.]

**ART H 322 Arts of the Roman Empire (also Classics 350) #**

Fall. 4 credits. A. Ramage.

The visual arts in the service of the first world state. The course starts with the architecture, painting, and sculpture of the Etruscan and Republican period but concentrates on monuments of the Imperial era in Italy and the provinces until the time of Constantine. Art made for private patrons is considered, along with the official presentations of the emperors.

**[ART H 323 Painting in the Greek and Roman World (also Classics 323) #**

4 credits. Not offered 1998-99.

A. Ramage.]

**[ART H 325 Greek Vase Painting (also Classics 325) #**

4 credits. Not offered 1998-99.

A. Ramage.

A stylistic and iconographical approach to an art in which the Greeks excelled. The course will be arranged chronologically from the early (eleventh century B.C.), anonymous beginnings to the "personal" hands of identifiable masters of the fifth and fourth centuries B.C. Styles of cities other than Athens will be stressed.]

**[ART H 326 Greek Cities and Towns (also Classics 326) #**

4 credits. Prerequisite: Classics/History of Art 220 or permission of instructor. Not offered 1998-99. J. Coleman.]

**[ART H 327 Greek and Roman Coins (also Classics 327) #**

4 credits. Not offered 1998-99.

A. Ramage.

The varied issues of Greek cities and the Roman state are examined. Coins are considered as art objects as well as economic and historical documents. The changes in design, value, and metals from the origins of coinage to the late Roman period are studied. Lectures, student presentations, and work with the actual examples.]

**ART H 328 Greeks and Barbarians (also Classics 322) #**

Spring. 4 credits. J. Coleman.

For description, see CLASS 322.

**[ART H 329 Greek Sculpture (also Classics 329) #**

4 credits. Not offered 1998-99.

J. Coleman.

For description, see CLASS 329.]

**ART H 332 Architecture in the Middle Ages (also Architecture 382, Religious Studies 332) #**

Fall. 4 credits. R. G. Calkins.

A survey of medieval architecture from the Early Christian period to the Late Gothic (A.D. 300-1500). Considerable emphasis will be placed on the development of structural systems and upon the form, function, and meaning of important medieval buildings.

**[ART H 333 Early Medieval Art and Architecture #**

4 credits. Not offered 1998-99.

R. G. Calkins.

Sculpture, painting, and architecture in the period from the late antique through the Carolingian era (A.D. 300-900). The evolution of the early Byzantine tradition will also be considered.]

**[ART H 334 Romanesque Art and Architecture #**

4 credits. Not offered 1998-99.

R. G. Calkins.

The painting, manuscript illumination, sculpture, and architecture of the eleventh and twelfth centuries, primarily in France, England, and Spain. Particular attention will be paid to the art of the Pilgrimage Roads, the manifestation of specific regional styles, the problems of Byzantine influence, the significance of the art of the church treasures, and the factors that brought about the transition to the early Gothic.]

**[ART H 335 Gothic Art and Architecture (also Religious Studies 335) #**

4 credits. Not offered 1998-99.

R. G. Calkins.]

**[ART H 336 Prelude to the Italian Renaissance (also Religious Studies 336) #**

4 credits. Not offered 1998-99.

R. G. Calkins.]

**ART H 337 The Medieval Illuminated Book (also Religious Studies 337) #**

Fall. 4 credits. R. G. Calkins.

A study of selected major examples of medieval illuminated manuscripts from between A. D. 300 and 1500. Facsimiles of major manuscripts such as the Lindisfarne Gospels, the Book of Kells, and the Hours of Mary of Burgundy will be examined. Students will write a research paper on a manuscript of their choice. Two lectures, plus a session each week in the Rare Book Room.

**[ART H 341 Flemish Painting (also Religious Studies 342) #**

4 credits. Not offered 1998-99.

R. G. Calkins.

An examination of Flemish painting in the 15th century, with emphasis on the works of Robert Campin, Jan van Eyck, Roger van der Weyden, Hugo van der Goes, Hans Memling, and ending with Jerome Bosch. Issues of the social, economic, and devotional context will be discussed as they pertain to the particular development of Northern Realism and Symbolism during this century.]

**ART H 343 Italian Renaissance of the Fifteenth Century #**

Fall. 4 credits. C. Lazzaro.

This course examines the artistic production of the fifteenth century in its social and cultural context. The new style, which was developed in Florence in the early century and spread to other city-states in Italy, is examined in the context of the new educated class, the increased wealth of the mercantile, urban class, and the new role of family in society.

**ART H 344 Italian Renaissance of the Sixteenth Century: Leonardo, Michelangelo, and Raphael #**

Spring. 4 credits. C. Lazzaro.

This course focuses on the three great artists of the late fifteenth and sixteenth century, Leonardo, Michelangelo, and Raphael. It examines each as a thinker as well as an artist, through their own writings together with their works of painting, sculpture, and architecture. It also analyses the contemporary constructions of the artist as genius and as courtier in the biographies and other writings about them.

**[ART H 345 Rome, Florence, and Venice in the Sixteenth Century #**

4 credits. Not offered 1998-99.

C. Lazzaro.

This course examines the distinctive cultural identities and their visual representation of three city-states in sixteenth-century Italy: Rome, Florence, and Venice. A papal state, a republic turned duchy ruled by the Medici dynasty, and an oligarchic republic, they had in common a "civil society," a social and intellectual elite of both rulers and patricians joined by a shared classical culture. Artistic models and mythological figures from classical antiquity provided a universal visual language, which was modified by local artistic traditions and histories. The course examines the images and symbols of each state; center of power, including St. Peter's, the Vatican, and the Capitoline Hill in Rome, the Piazza Signoria and San Lorenzo complex in Florence, and the piazzas of San Marco and the Doge's palace in Venice; government-sponsored propagandistic works of sculpture, wall painting, architecture, and spectacle in the buildings and squares, issues of church and state relations, and in Florence of civic and dynastic ideas of the state; and also the role of private collections and commissions (of portraits, allegorical paintings, palaces, and gardens) in establishing cultural identity. The course discusses works of some of the major artists of the sixteenth century, including Michelangelo, Raphael, Bronzino, and Titian, but focuses on topics and issues, which are examined through class lectures, discussions, weekly readings, and term paper.]

**ART H 348 Renaissance Art in Northern Europe: The Sixteenth Century #**

Spring. 4 credits. Prerequisites: History of Art 245, 341, 342, 351 or permission of instructor. S. Reiss.

This course will examine the painting, graphic arts, and sculpture of Northern Europe in the sixteenth century. Principal emphasis will be on art produced in the Netherlands and Germany. Topics to be considered include patronage and audience in different regions of Northern Europe, the importance of fifteenth-century traditions, the impact of Italian art, and the development of specifically northern forms of artistic expression in religious and secular art, including landscape, portraiture, and genre painting. Among the themes we will explore are constructions of gender and representations of women in Northern Renaissance art, attitudes to peasants and the urban lower classes, the impact of the Protestant Reformation and iconoclasm, and the development of the art market in the North. Artists to be considered include Bosch, Bruegel, Dürer, and Grünewald.

**[ART H 350 The Culture of the Renaissance I (also History 361 and Comparative Literature 361) #**

4 credits. Each student must enroll in a section. Not offered 1998-99. C. Lazzaro, J. M. Najemy.]

**[ART H 351 The Culture of the Renaissance II (also Comparative Literature 362, History 364, Music 390, Religious Studies 362, English 325) #**

4 credits. Not offered 1998-99.

W. J. Kennedy, C. Kaske.

For description, see COM L 362.]

**ART H 352 The City of Athens from Theseus to Justinian (also Classics 352 and Archaeology 352) #**

Spring. 3 credits. M. Landon.  
For description, see CLASS 352.

**ART H 353 Art and Death in Europe: 1250-1600 #**

Fall. 4 credits. S. Reiss.  
This course will explore rituals, images, and monuments associated with death and dying in late medieval and early modern Europe. Topics to be considered include cultural attitudes towards death, the impact of the Black Death, the *ars moriendi*, the relation between death and eroticism, funeral rituals, and, especially, tomb sculpture and mortuary structures in Italy, France, the Netherlands, Germany, England, and Spain.

**[ART H 355 Art as Spectacle: The Italian Baroque (also Religious Studies 352) #**

4 credits. Not offered 1998-99.  
K. Barzman.  
This course casts the Italian Baroque as a society of spectacle. Lectures and discussions will focus on frescoes, public sculpture, architecture, and the re-organization of urban space in Italian cities from the end of the Council of Trent (1563) through the papacy of Clement XII (1740). Emphasis will be placed on spectacular display, on the forms of address intended to guide and impress the viewer, and on the various institutions and individuals served by this kind of cultural production. Artists covered include Bernini, Borromini, Caravaggio, Carracci, Gaulli, Cortona, and Tiepolo.]

**ART H 358 Religion and Images Across the Early Modern World (also Religious Studies 360) #**

Spring. 4 credits. K. Barzman.  
This course will look at the religious use of images from the fourteenth through the eighteenth centuries. It will take a cross-cultural perspective, focusing on Italy, France, the Low Countries, Spain, and Spanish colonial South America and Meso-America. The emphasis will be on major iconographic themes (e.g., the Passion of Jesus, Eucharistic imagery, the miraculous interventions of Mary and the saints) and on the incorporation of images in rituals of devotional practice revolving around marriage, birth, illness, death, and the salvation of the soul. We will concentrate on works ranging from anonymous production to the masterpieces of early modern artists (including Giotto, van Eyck, Dürer, Grünewald, Caravaggio, Rubens, Ribera, and Murillo.)

**[ART H 360 Painting and Everyday Life in Nineteenth-Century America (also American Studies 360) #**

4 credits. Not offered 1998-99.  
L. L. Meixner.  
Nineteenth-century American painters often constructed images of "exceptionalism," DeTocqueville's term for the social harmony and material abundance he considered unique to the New World. Embedded in these icons of national cohesion, however, were signs of race, class, and political conflict that we will decode through interdisciplinary methods. Our topical units include New England portraiture and commodity, Hudson River landscape and corporate (railroad) patronage, images of African-Americans and Reconstruction, images of Native Americans, the West, and Manifest Destiny. Through these, we will

challenge the assumption that American art celebrated democracy, and consider more conflicted attitudes. Our key artists include John S. Copley, George Caleb Bingham, Winslow Homer, Mary Cassatt, and Thomas Eakins. Our readings include art historical texts and others by Poe, Emerson, and Whitman.]

**[ART H 361 The Social History of Nineteenth-Century European Painting #**

4 credits. Not offered 1998-99.  
L. L. Meixner.]

**[ART H 362 Impressionism and Society 4 credits. Not offered 1998-99.**

L. L. Meixner.  
This course discusses French Impressionism as it relates to nineteenth-century public life. Chief artists include Manet, Cassatt, Morisot, Degas, Pissarro, Monet, Seurat, Toulouse-Lautrec, and Van Gogh. Images are interpreted as cultural products of the Third Republic, with close attention to café and brothel society, middle-class leisure, *japonisme* and imperialism, workers' movements, and Le Bon's theory of crowds. Woven into historical discussions are more theoretical considerations of utopia, capital, pathology, and the public body. Overarching issues of class, gender, and power in urban Paris will be addressed through the writings of Baudelaire, Benjamin, Pollock, Jameson, and Zola.]

**[ART H 365 Art from 1940 to 1990**

4 credits. Not offered 1998-99.  
J. E. Bernstock.  
Major artists and movements in the United States since 1940, beginning with Jackson Pollock and Abstract Expressionism, and continuing through recent developments in art. Attention is devoted to the critical reception that artists have received and to artists' statement themselves.]

**[ART H 370 Visual Culture and Social Theory (also Government 375 and Comparative Literature 368)**

4 credits. Not offered 1998-99. A. Vidler, S. Buck-Morss.  
For description, see Government 375.]

**ART H 371 Architectural History of Washington, D.C.**

Fall or spring. Variable credit. Only for students in the Cornell-in-Washington program. Only for non-architects.  
P. Scott.  
A historical and critical survey of the architecture of Washington. Attention will be given to the periods, styles, architects, and clients—public and private—of the notable buildings and to the urbanscape of the nation's capital. The vocabulary of architectural analysis and criticism will be taught. Field trips required.

**[ART H 378 Art in African Culture and Society (also AS&RC 310) @**

3 credits. Not offered 1998-99. S. Hassan.  
For description, see AS&RC 310.]

**ART H 380 Introduction to the Arts of China (also Archaeology 380 and Asian 383) @ #**

Fall. 4 credits. A. Pan.  
This course offers a survey of the art and culture of China, from the Neolithic period to the twentieth century. We begin with an inquiry into the meaning of national boundaries and the controversy of the Han Chinese

people, which will help us identify the scope of Chinese culture. Pre-dynastic (or prehistoric) Chinese culture will be presented through both legends about the origins of the Chinese, and scientifically excavated artifacts. Art of the dynastic and modern periods will be presented in light of contemporaneous social, political, geographical, philosophical and religious contexts. Students will work directly with objects in the Herbert F. Johnson Museum of Art.

**ART H 395 The House and the World: Architecture of Asia @**

Spring. 4 credits. K. McGowan.  
In many Asian societies, houses are regarded as having a life force or a vitality of their own. This course will examine the role of the house as a living organism in Asia, a symbol of the cosmos encapsulated. Houses also function in many societies as storehouses for material and immaterial wealth; artifacts such as textiles, jewelry, sculptures, and masks function within the house as ancestral heirlooms, conveying their own currents of life force, the power from which serving to blend with the vitality of the house. This accumulation of energy can be conferred upon the inhabitants, or it may exist as a quiet reservoir of power, distinct from its occupants. The indigenous architectural traditions of India, Vietnam, Thailand, Indonesia, and the Philippines will be examined. By studying the inhabited spaces of others, divining their technologies of construction and their applied symbolologies, students will be provided with powerful tools for examining the visual skills and sensibilities of other cultures. "The House and the World" will serve as the metaphor for these discoveries.

**[ART H 396 The Arts of Southeast Asia @ #**

4 credits. Not offered 1998-99.]

**Seminars**

Courses at the 400 and 500 level are open to upperclass students, majors, and graduate students. All seminars involve the writing and presentation of research papers. Enrollment is limited to 15 students, and *permission of the instructor is required*. Students may repeat courses that cover a different topic each semester.

**ART H 400 Proseminar for Art History Majors: The History and Practice of Art History**

Fall. 4 credits. Prerequisite: History of Art majors only. Enrollment is limited.  
C. Lazzaro.

This seminar examines the history of the discipline of art history and focuses on the various approaches and methods of its practitioners. We begin with the early history of the discipline, but concentrate on the twentieth century and the concerns with style, iconography, social history, and the post-structuralist theories of the last decades.

**ART H 401 Independent Study**

Fall or spring. 2-4 credits. May be repeated for credit. Prerequisite: permission of a department faculty member.  
Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

**ART H 402 Independent Study**

Fall or spring. 2-4 credits. May be repeated for credit. Prerequisite: permission of a department faculty member. Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

**[ART H 407 Seminar on Museum Issues**

4 credits. Prerequisite: permission of instructor. Limited enrollment. All classes will meet in the Johnson Art Museum Study Gallery. Not offered 1998-99. Staff. This undergraduate seminar will utilize the resources of the Johnson Art Museum and is designed to give students with a strong art history background the opportunity to work closely and directly with original objects from the museum's major collections. The course will focus on the broad issue of art and connoisseurship and will address critically the question of what determines quality in the work of art. Topics to be covered in the weekly sessions will include methods of attribution, fakes and forgeries, technique and media, restoration and conservation. Some sessions will involve the curatorial staff of the museum. Frequent reports and a significant final paper will be expected of all participants. Enrollment is limited, and permission of the instructor is necessary before the first meeting. Students interested in this course should indicate so by notifying the department directly at the time of pre-registration.]

**[ART H 423 Ceramics (also Classics 423 and Archaeology 423)**

4 credits. Not offered 1998-99. Staff.]

**[ART H 424 Sardinia and the Cities of Asia Minor (also Archaeology 432 and Classics 432) #**

4 credits. Not offered 1998-99. A. Ramage.]

**[ART H 425 Seminar on the Bronze Age Architecture of Asia Minor (also Classics 430 and Archaeology 425) #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. P. I. Kuniholm.

The course will cover major architectural building programs from Neolithic Catal Hüyük, Beycesultan, to the final phases of Troy and Hittite Bogazköy. The art and archaeology of these civilizations will be taken into account when relevant. Reading knowledge of German useful.]

**[ART H 427 Seminar on Roman Art and Archaeology (also Classics 435 and Archaeology 435) #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. A. Ramage.]

**[ART H 434 The Rise of Classical Greece (also Classics 434) #**

4 credits. Recommended: Classics 220 or History of Art 220, Classics 221 or History of Art 221, or permission of instructor. Not offered 1998-99. P. I. Kuniholm.

The art and archaeology of the Greek dark ages. Topics include: site reports, pottery, metalworking, the introduction of the alphabet, the beginnings of coinage, and links with Anatolia and the Near East.]

**[ART H 441 Medieval Art in Washington Collections**

4 credits. Only for students in the Cornell-in-Washington program. Not offered 1998-99. R. G. Calkins.]

**ART H 448 Studies in Sixteenth-Century European Art #**

Spring. 4 credits. C. Lazzaro.

Topic for spring 1999: Constructing the Self in the Sixteenth Century. This seminar examines portraits, self-portraits, autobiographies, and biographies, as well as treatises on etiquette and behavior. In this society, "civility," the mark of class and education, was conveyed through bearing, gesture, manners, and speech, as well as social organization and artistic interests, all of which are evident in both visual and verbal representations of individuals.

**[ART H 450 Women in Italian Renaissance Art (also Women's Studies 451) #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. C. Lazzaro.

This seminar examines representations of the Madonna and Child from the fourteenth and fifteenth centuries, the narrative scenes painted on chests and other domestic furniture, biblical and historical heroines such as Judith and Lucretia, portraits of patrician women and courtesans, and violence to women in a political context. It will investigate the contemporary ideas about motherhood, beauty, sexuality, social presentation, and gender roles in society that inform these representations. We will discuss the existing critical frameworks for interpreting them in feminist art history and theory (particularly in Renaissance studies). We will be concerned especially with how visual images are encoded with meaning, what kind of relationship can be established with their historical context, and how they convey social constructs as ideology.]

**[ART H 451 Prints of the Fifteenth through the Seventeenth Century #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. C. Lazzaro.

This seminar has several aims: to introduce students to prints—the techniques, styles, and issues of connoisseurship—and to the major printmakers of the period, including Marcantonio Raimondi, Dürer, and Rembrandt; to give students first-hand experience with works of art in the Herbert F. Johnson Museum; and to consider the social and cultural issues raised in the medium of prints and through their unique visual language. These issues include the social hierarchies of class and gender (including witches), moral concerns and religious devotion, the construction and transmission of notions of antiquity and classicism, and the representation of the urban and rural environment. Students will give brief presentations on prints in the collection and longer ones of their own research projects on these and related topics.]

**[ART H 456 Seminar in Baroque Art #**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. K. Barzman.

This seminar will examine the historical circumstances within which academies of art emerged in Western Europe, with particular attention to official academies of state and their role in the cultural politics of absolutism.

We will also focus on academic debates about art and representation: the codification of programs of study; various practices other than formal study promoted within academies (e.g., drawing after the nude model); the effects of these forms of discipline on social relations among artists, and between artists and patrons; and works of art themselves as expressions of academic discourse on truth, nature, the body, and (ultimately) the body politic. Topics may also include the transformation of academies and training programs for professional and amateur artists from the sixteenth through twentieth centuries.]

**ART H 457 The Sexed Body in Western Art (also Women's Studies 457) #**

Fall. 4 credits. K. Barzman.

This course examines the mapping of sex onto bodies in Western art, and compares representational practices that have been said to divide "the pornographic" from "legitimate" representations of "the nude." Readings range from Genesis to Freud and Foucault; images, from "Old Master" paintings to film, video, and performance art.

**[ART H 461 Fin-de-siècle Cultures in Europe, England, and America #**

4 credits. Prerequisite: permission of instructor. Auditing is not permitted. Not offered 1998-99. L. L. Meixner.]

**[ART H 462 Topics in Early Modernism #**

Fall. 4 credits. Prerequisite: permission of instructor. Auditing is not permitted. Not open to freshmen or sophomores. Not offered 1998-99. L. L. Meixner.]

**[ART H 463 Studies in Modern Art**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. E. Bernstock.]

**ART H 464 Studies in Modern Art**

Spring. 4 credits. Prerequisite: Art History 365 and permission of instructor. Auditing is not permitted. J. E. Bernstock. Topic for 1999: Pop Art Criticism. This seminar will focus on criticism of pop art since the early sixties—how it has changed and how it has affected the public's reception of the works of art.

**[ART H 466 Women Artists (also Women's Studies 404)**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. E. Bernstock.

This seminar will be devoted to a study of the work of women artists from antiquity to the present. The works of the most prominent women artists from each period will be studied in relation to the changing roles of women in society. The artists to be studied include Jennifer Bartlett, Artemisia Gentileschi, Elizabeth Vigée-Lebrun, Mary Cassatt, Käthe Kollwitz, Georgia O'Keeffe, Louise Nevelson, Joan Mitchell, Judy Chicago, and Barbara Kruger.]

**[ART H 476 Seminar in American Art**

4 credits. Not offered 1998-99. L. L. Meixner.]

**ART H 481 Art of the Tang Dynasty (618-907) @**

Fall. 4 credits. A. Pan.

This seminar examines art and culture of the Tang dynasty, one of China's golden ages, by focusing on new archaeological discoveries and important museum objects. The course is



divided into three sections: court art, secular art, and Buddhist art. Artifacts discovered in a group of Tang imperial tombs north of the capital city Chang'an represent the height of Tang imperial art, and an analysis of these works will enhance our understanding of imperial taste, patronage, and the high Tang aesthetic. These issues form the foundation for the study of Tang secular art, including gold and silver wares, ceramics, painting and calligraphy. Tang Buddhist art was a reflection of the Sinification of this foreign religion; our site-oriented study of Tang Buddhist art will explore the various sectarian developments as manifested in architectural and cave temple settings, sculpture and painting.

**ART H 490 Art and Collecting: East and West @**

Fall. 4 credits. K. McGowan.  
This seminar will consider in detail the relationship between art and society in China after the collapse of Imperial power. The focus will be on development in the art of painting, particularly painting of the contemporary period, but other art forms that had a large impact on the formation of a modern viewpoint will be examined and discussed. Background lectures will cover the earlier landscape tradition, the rise of the literati culture, and the development of critical theories about the arts of painting, calligraphy, and poetry. Seminar topics will investigate the impact of western thought on Chinese aesthetics, the role of photography and the wood-block print medium in changing the perceptions of the west about China, the response of the Chinese artists to the political upheavals of the early twentieth century, the arts in the service of the state, and the arts since the end of the Cultural Revolution. Weekly readings and class discussion expected, with a final research paper to be developed for presentation.

**[ART H 494 Feminist Theory and the History of Art**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
K. Barzman.

Seminar participants will examine the impact of feminist theory on art historical practice. Based on critical analysis of texts from the early 1970s to the present, we will consider the range of methods employed, the discursive traditions to which they belong (e.g., liberal, Marxist, psychoanalytic, poststructuralist), the relative merits of the methods, and the interpretive problems they present. At the graduate level, some additional meetings and work required.]

**[ART H 520 Seminar in Classical Archaeology (also Classics 630 and Archaeology 520)**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
P. I. Kuniholm.]

**ART H 531 Problems in Medieval Art and Architecture (also Religious Studies 531)**

Spring. 4 credits. Prerequisite: permission of instructor. R. G. Calkins.  
Topic for spring 1999: Archaeology of the Book. A detailed investigation of the methods and procedures of examining medieval illuminated manuscripts. Emphasis will be on understanding the hand written book as a functioning object: its production, decoration, use, and reception. Students will conduct

research on a facsimile of a medieval manuscript amongst those housed in the Rare and Manuscript Collections, Kroch Library. Discussions, reports on readings and presentations of research paper in class.

**[ART H 540 Seminar in Renaissance Art**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
C. Lazzaro.]

**[ART H 549 Problems in Interpretation in Italian Renaissance Art**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
C. Lazzaro.

This seminar will examine assumptions about meaning and how meaning is produced in Renaissance art. Various interpretative strategies will be examined, among them iconographic, semiotic, feminist, and psychoanalytic, within a specifically Renaissance literary, intellectual, and social context. Texts by Panofsky and critical discussions of them, Baxandall, Bryson, and others will be read and discussed with reference to particular works of art. The seminar is intended primarily for graduate students in all areas of the history of art and those in other disciplines with an interest in the Italian Renaissance. Senior History of Art majors with background in the Italian Renaissance are also welcome.]

**ART H 555 Baroque Ephemera and Public Performance #**

Spring. 4 credits. Prerequisite: permission of instructor. K. Barzman.

This course explores the means by which "baroque" systems of display constitute virtual realities—the hyper-real of early modern and modern spectacle, with its dazzling forms of address intended to engender awe and to guide individuals and corporate bodies to specific ends. Media will include painting, sculpture, architecture, film, and staged events (parades, executions, etc.) within which subjects enter the field of spectacle.

**[ART H 571 African Aesthetics (also AS&RC 503) @**

4 credits. Not offered 1998-99. S. Hassan.  
For description, see AS&RC 503.]

**ART H 580 Problems in Asian Art (also Asian Studies 602 and Religious Studies 580)**

Spring. 4 credits. Prerequisite: permission of instructor. K. McGowan.

Topic for spring 1999: Water: Art and Politics in Southeast Asia. This seminar will focus on the significance of water—economic, religious, political, social—and its role in the art and architecture of Mainland and Island Southeast Asia. While India and China can be seen to provide aquatic themes and patterns for transformation, the emphasis in this course will be on local ingenuity, how technologies of water use and control at ancient sites in Southeast Asia can be seen to shape vivid visual symbolologies, past and present.

**ART H 591-592 Supervised Reading**

591, fall; 592, spring. 4 credits. May be repeated for credit. Limited to graduate students.

**[ART H 594 Feminist Theory and the History of Art**

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
K. Barzman.]

**ART H 600 Honors Work**

Fall or spring. 8 credits. Intended for senior art history majors who have been admitted to the honors program. Basic methods of art historical research will be discussed and individual readings assigned, leading to the selection of an appropriate thesis topic.

**ART H 601 Honors Work**

Fall or spring. 8 credits. Prerequisite: History of Art 600.  
The student under faculty direction will prepare a senior thesis.

## HUNGARIAN

See Language Courses under Modern Languages.

## INDONESIAN

See under Department of Modern Languages.

FALCON Program (Indonesian)

J. U. Wolff, 307 Morrill Hall, 255-0733.

## ITALIAN LANGUAGE AND LINGUISTICS

See Language Courses under Modern Languages and Linguistics.

## ITALIAN LITERATURE

See under Department of Romance Studies.

## JAPANESE

See under Departments of Asian Studies and Modern Languages.

## JAVANESE

See Language Courses under Modern Languages.

## KHMER (CAMBODIAN)

See Language Courses under Modern Languages.

## KNIGHT, JOHN S., WRITING PROGRAM

See under John S. Knight Writing Program in "Special Programs and Interdisciplinary Studies."

## KOREAN

See under Modern Languages.

## LATIN

See under Department of Classics.

## LINGUISTICS

S. McConnell-Ginet, chair; J. Whitman, director of graduate studies (320 Morrill Hall); M. Diesing, director of undergraduate studies (212 Morrill Hall); J. Bowers, W. Browne, V. Carstens, A. Cohn, C. Collins, W. Harbert, S. Hertz, A. Nussbaum, M. Suñer, D. Zec, A. Zucchi. Visiting: C. Brisson, M. Meyerhoff, J. Watkins.

Linguistics, the systematic study of human language, lies at the crossroads of the humanities and the social sciences, and much of its appeal derives from the special combination of intuition and rigor that the analysis of language demands. The interests of the members of the Department of Linguistics and linguistic colleagues in the Department of Modern Languages and other departments span most of the major subfields of linguistics: phonetics and phonology, the study of speech sounds; syntax, the study of how words are combined; semantics, the study of meaning; historical linguistics, the study of language change over time; sociolinguistics, the study of language's role in social and cultural interactions; and applied linguistics, which relates the results of linguistic research to problems of bilingual education, second-language learning, and teaching.

Studying linguistics is not a matter of studying many languages. Linguistics is a theoretical discipline with ties to such areas as cognitive psychology, philosophy, logic, computer science, and anthropology. Nonetheless, knowing particular languages (e.g., Spanish or Japanese) in some depth can enhance understanding of the general properties of human language. Not surprisingly, then, many students of linguistics owe their initial interest to a period of exposure to a foreign language, and those who come to linguistics by some other route find their knowledge about languages enriched and are often stimulated to embark on further foreign language study.

Students interested in learning more about linguistics and its relationship to other disciplines are encouraged to take Linguistics 101, which is a prerequisite for most other courses in the field, or one of the freshman writing seminars offered in linguistics (on topics such as metaphor, American Sign Language, and the science of language). Linguistics 101 and other introductory courses fulfill the social science distribution requirement. Most 100- and 200-level courses have no prerequisites and cover various topics in linguistics (e.g., Ling 118 *Varieties of Human Language*, Ling 216 *Mathematical Linguistics*) or focus on the linguistics of a particular geographic region or historical development of particular languages (e.g., Ling 217 *History of the English Language*, Ling 230 *Introduction to Southeast Asian Languages and Linguistics*). Some of these courses also fulfill the breadth requirements.

Talks and discussions about linguistics are offered through the Undergraduate Linguistics Forum and the Cornell Linguistic Circle. These meetings are open to the university

public and anyone wishing to learn more about linguistics is most welcome to attend.

### The Major

For questions regarding the linguistics major, contact Professor Molly Diesing (212 Morrill Hall, 255-8635, md20@cornell.edu).

The prerequisite for a major in linguistics is the completion of Linguistics 101 and either Linguistics 201 or 203. The major has its own language requirement, which should be completed as early as possible: qualification in two languages other than English, one of which must be either non-European or non-Indo-European. With approval of the department's director of undergraduate studies, this requirement may be waived (i.e., reduced to the normal arts college language requirement) for students taking the cognitive studies concentration or a double major.

The other requirements for the linguistics major are as follows:

- 1) Linguistics 201 (Introduction to phonetics and phonology) or Linguistics 203 (Introduction to syntax and semantics), whichever one was not taken as a prerequisite to the major
- 2) Linguistics 314 (Historical)
- 3) Three of the following five courses, one of which must be either Phonology I or Syntax I:  
Linguistics 301 (Phonology I)  
Linguistics 303 (Syntax I)  
Linguistics 309 or 310 (Morphology I or II)  
Linguistics 319 (Phonetics I)  
Linguistics 421 (Semantics I)
- 4) A course at or beyond the 300 level in the structure of English or some other language, or a typological or comparative structure course such as Linguistics 401, 402, or Field Methods (Linguistics 600).
- 5) One additional linguistics course for at least 4 credit hours, which may be a course with significant linguistic content in a related field.

**Honors.** Applications for honors should be made during the junior year. Candidates for admission must have a 3.0 (B) average overall and should have a 3.2 average in linguistics courses. In addition to the regular requirements of the major, the candidate for honors will complete an honors thesis and take a final oral examination in defense of it. The thesis is usually written during the senior year but may be begun in the second term of the junior year when the student's program so warrants. The oral examination will be conducted by the honors committee, consisting of the thesis adviser and at least one other faculty member in linguistics. Members of other departments may serve as additional members if the topic makes this advisable. Linguistics 493 and 494 may be taken in conjunction with thesis research and writing but are not required.

### General Linguistics

**Fees:** Depending on the course, a small fee may be charged for photocopied texts for course work.

## Freshman Writing Seminars

### LING 100 Language, Thought, and Reality

For descriptions, see freshman writing seminar brochure.

### LING 101 Theory and Practice of Linguistics

Fall or spring. 4 credits each term.  
M. Diesing.

An introductory course designed to provide an overview of the science of language, especially its theoretical underpinnings, methodology, and major findings. The course focuses on the basic analytic methods of several subfields of linguistics including phonetics, phonology, morphology, syntax, semantics, language variation, language change, and psycholinguistics.

### [LING 118 Varieties of Human Language

Fall. 3 credits. Not offered 1998-99.

Language diversity has a place in our complex world. Whether spoken by a handful of speakers or by hundreds of millions, each language manages the same tasks of communication and fits in with its social environment. Language identification, literacy, and multilingualism are among the issues touched on.]

### LING 170 Introduction to Cognitive Science (also Cognitive Studies 101, Computer Science 101, Philosophy 191, and Psychology 102)

For description, see COGST 101.

### LING 201 Introduction to Phonetics and Phonology

Spring. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor. A. Cohn.

An introduction to the study of human speech sounds and how they pattern in languages. The first part of the course will focus on phonetics: the production, acoustics, and perception of speech, with attention to both the common and the less common sounds of the world's languages. The second part of the course will focus on phonology: how human speech sounds pattern within and across languages, with an emphasis on the rules that govern these patterns and their possible representation.

### LING 203 Introduction to Syntax and Semantics

Fall. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor. C. Brisson.

This course focuses on language as a system of knowledge that enables native speakers to create and interpret the structures of their language. Part of the course will consider issues of syntactic structure, such as the order of constituents, the hierarchical organization of grammars, and syntactic universals. The other part of the course will focus on meaning and interpretation, addressing such issues as the role of context, how information is structured, and how it is encoded in the syntax.

### [LING 212 Language and Culture

Spring. 3 credits. Not offered 1998-99.  
J. Whitman.

We often assume that there is a close relationship between differences in language and cultural variation. This course focuses on that relationship, beginning with an examination of the linguistic relativity hypothesis,

which posits a link between basic properties of languages and crosscultural differences in world view. We also examine potential cultural determinants of variation in language: pronouns and honorific systems, systems of ritual and taboo in language, and the impact of narrative organization on grammar. Special attention is paid to 'extreme' forms of language: invented languages from Esperanto to Klingon; glossolalia and trance languages; language games and secret languages.]

**[LING 215/715 Psychology of Language (also Psychology 215)]**

Not offered 1998–99.

For description, see PSYCH 215.]

**[LING 216 Mathematical Linguistics]**

Spring. 4 credits. Not offered 1998–99.

A. Zucchi.

The course is an introduction to the mathematical concepts and techniques most frequently used in theoretical linguistics.]

**LING 244 Language and Gender (also Women's Studies 244)**

Spring. 4 credits. For non-majors or majors. S. McConnell-Ginet.

This course explores connections between language (use) and gender/sex systems, addressing such questions as the following. How do sex and gender affect the ways we speak, the ways we interpret and evaluate speech? How do sociocultural differences in women's and men's roles affect their language use, their relation to language change? What is meant by sexist language? How does conversation structure the social worlds of women and men? Readings draw from work in linguistics, anthropology, philosophy, psychology, literature, and general women's studies and feminist theory.

**[LING 246/546 Minority Languages and Linguistics]**

Spring. 4 credits. Graduate students register under Ling 546. Not offered 1998–99. W. Harbert, W. Browne, V. Carstens, M. Diesing, and M. Suñer.

This course examines minority languages from linguistic, social, and political perspectives. Topics discussed include language death, language maintenance, bilingualism, language contact, official status, and related issues. Languages/language families to be discussed include Spanish in the U.S., Celtic languages, African languages, Yiddish, and others, depending on the special interests of the instructors.]

**LING 264 Language, Mind, and Brain**

Fall. 4 credits. For non-majors or majors. Prerequisite: a basic course in linguistics and/or psychology is desirable. J. Bowers.

An introductory course that emphasizes the formal structure of natural language and its biological basis. The following topics are covered: the formal representation of linguistic knowledge, principles and parameters of universal grammar, the basic biology of language, mechanisms of linguistic performance, the modularity hypothesis, and language and cognition. This course is especially suited for majors in fields such as psychology, philosophy, computer science, and linguistics (and also for those enrolled in the concentration in cognitive studies) who want to take a one-semester introduction to linguistics that concentrates on the formal principles that govern linguistic knowledge, along with some discussion of their biological realization and their use in perception and production.

**[LING 270 Truth and Interpretation (also Cognitive Studies 270 and Philosophy 270)]**

Not offered 1998–99.

For description, see PHIL 270.]

**LING 301–302 Phonology I, II**

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Linguistics 301, Linguistics 201 or equivalent; for Linguistics 302, Linguistics 301 or permission of instructor. D. Zec.

301 provides a basic introduction to phonological theory. The first half of the course focuses on basic principles of phonology, patterns of sounds, and their representations. In the second half, the nature of syllable structure and feature representations are explored. 302 provides further refinement of the issues investigated in 301, focusing in particular on metrical theory, Lexical Phonology, autosegmental phonology, and Prosodic Morphology.

**LING 303–304 Syntax I, II**

303, fall; 304, spring. 4 credits each term.

Prerequisites: for Linguistics 303, Linguistics 203; for Linguistics 304, Linguistics 303 or permission of instructor. C. Collins.

303 is an introduction to syntactic theory, with emphasis on the classical theory of transformational grammar. 304 is an advanced course, surveying current syntactic models and dealing with such issues as the nature of syntactic representation, levels of representation, principles of universal grammar, and the relation of syntax and semantics.

**[LING 306 Functional Syntax]**

Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. Not offered 1998–99.

A general survey of syntactic theories that highlight grammatical function and reveal its role in discourse structure.]

**LING 309 Morphology**

Spring. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor. V. Carstens.

A general survey course, focusing on the relationship of meaning and form in morphology and introducing techniques of morphological analysis. Current research on form-meaning questions is discussed.

**[LING 310 Morphology II]**

Fall. 4 credits. Prerequisite: Linguistics 203 or permission of instructor. Not offered 1998–99. Staff.

Considers recent discussions in morphological theory, in particular the relationship of morphology and syntax.]

**LING 314 Introduction to Historical Linguistics #**

Spring. 4 credits. Prerequisite: Linguistics 201 or permission of instructor. J. Whitman.

A survey of the basic mechanisms of linguistic change, with examples from a variety of languages.

**LING 319 Phonetics I**

Fall. 4 credits. Prerequisite: Linguistics 201 or permission of instructor. J. Watkins.

Provides a basic introduction to the study of phonetics. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of some of the world's sounds, basic acoustics, computerized methods of

speech analysis, acoustic characteristics of sounds, speech perception, speech synthesis, stress and intonation.

**[LING 320 Phonetics II]**

Spring. 4 credits. Prerequisite: Linguistics 319. Not offered 1998–99. A. Jongman.

This course is a continuation of Phonetics I and provides a more detailed survey of some areas in acoustic and articulatory phonetics. Topics include feature theory, vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, coarticulation, theories of speech production, and prosody. In addition, a number of "hands-on" projects will be part of the course.]

**LING 325 Pragmatics**

Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. S. McConnell-Ginet.

An introduction to the study of such topics as speech acts, presupposition, deixis, implicatures, and conversational strategies.

**[LING 334 Non-Linear Syntax]**

Fall. 4 credits. Prerequisite: Linguistics 303 or equivalent. Not offered 1998–99. C. Rosen.

Analyses of some twenty diverse languages are examined with the aim of building a formal account of the syntactic constructions existing in the world's languages, and discerning universals that delimit this inventory. Non-linear theory, designed for comparative work, depicts constructions in the abstract, not imagining them as arrays of elements in space. Simultaneously it studies the morphosyntactic systems that relate constructions to their linear realizations.]

**LING 350 Representing Language: Knowledge Taught and Untaught (also Cognitive Studies 350)**

Fall. 4 credits. J. Gair.

This course will deal with some of the discoveries made in modern linguistics that reveal some fundamental properties of human language and the special human capacity for it, as well as some of the still unsettled questions about it. It will also trace some of the paradigm shifts that have occurred within linguistics, and consider some of the ways in which language has been represented, both within the science of linguistics and outside of it, by contrasting what is known with what is popularly believed to be true. Projected topics will include: innateness vs. language as socio-cultural; language variability vs. Universal Grammar; language change and relatedness of languages; the question of correctness.

**[LING 370 Language and Cognition (also Psychology 370)]**

Spring. 4 credits. Prerequisite: Linguistics 101 or 264 or Psychology 215, or permission of one of the instructors. Not offered same years as Psychology 416. Not offered 1998–99.

Examination of current research on selected topics on language from both linguistic and psychological perspectives. Topics may include: universal grammar and language acquisition, syntactic parsing, word recognition, sentence production, aphasia, and schizophrenic language.]

**LING 390 Independent Study in Linguistics**

Fall or spring. 1–4 credits variable. Prerequisite: Linguistics 101 or permission of instructor. Staff.

Independent study of linguistics topics not covered in regular curriculum for undergrads.

**[LING 401 Approaches to Language Typology I]**

Fall. 4 credits. Prerequisite: Linguistics 101 or equivalent. Not offered 1998-99. C. Rosen.

Study of a basic question of contemporary linguistics: in what ways do languages differ, and in what ways are they all alike? Efforts to formalize universals of syntax and to characterize the total repertory of constructions available to natural languages. Common morphological devices and their syntactic correlates. Emphasis on systems of case, agreement, and voice.]

**[LING 402 Approaches to Language Typology II]**

Spring. 4 credits. Prerequisite: a course in syntax. C. Collins.

A topics-oriented course focusing on the interaction between linguistic theory and crosslinguistic variation. Topics for 1998: syntactic properties interacting with rich inflection.

**[LING 405 Sociolinguistics]**

Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. M. Meyerhoff.

The principal work of linguistics is to describe, analyze, and understand the regularities of language systems. How, then, are we to deal with irregularities and variability when they are observed in language? This course will introduce and discuss the most significant issues in the study of language variation, and it will examine some of the methodologies that have been developed to study variation in language use.

We will consider the observable interactions between linguistic variables and social factors (e.g., age, sex, ethnicity) and review the main generalizations about these factors that sociolinguistics has arrived at in the last three decades. Some of the problems associated with the quantification and measurement of non-linguistic variables will be discussed and we will evaluate the various ways researchers have dealt with these problems.

**[LING 406 Ethnolinguistics]**

Spring. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. Not offered 1998-99. J. Wolff.

This course will be an introduction to the study of pidgin and creole languages and the issues surrounding them both in and beyond linguistics. Topics covered will include: genesis of pidgins and creoles; classification of pidgins and creoles; creoles and language universals; creoles and sociolinguistic variation; a module on Saramaccan Creole English; educational and language planning issues; sociohistorical issues; Black English.]

**[LING 413 Topics in Historical Linguistics #]**

Fall. 4 credits. Prerequisite: Linguistics 314 (formerly 410) or permission of instructor. Not offered 1998-99. W. Harbert and C. Rosen.

Examines a selection of recent research illustrating a variety of productive and innovative approaches to problems in historical linguistics. Readings center on phonological and morphological evolution in the Romance and Germanic families. Students carry out guided research projects.]

**[LING 421-[422] Semantics I, II]**

421, spring; [422]. 4 credits each term. Prerequisites: for Linguistics 421, Linguistics 203; for Linguistics 422, Linguistics 421 or permission of instructor. Spring: M. Diesing.

421: An introduction to semantics of natural language. The course starts from basic foundational questions concerning the nature of meaning and the empirical domain of semantic theory. Truth-conditional and logical theories and their application to the investigation of the structure of natural languages are extensively explored (with some comparisons with other approaches). Through the study of quantification, scope, anaphora, modalities, presuppositions, and the like, one tries to gain insight into general characteristics of the cognitive apparatus that is at the basis of our capacity for understanding sentences.

[422: Guides students into current work in semantic theory. The first half of the course is an introduction to Montague-style semantics, whose influence on current research is quite extensive. The second half of the course focuses on selected topics that have grown out of (and sometimes against) classical Montague semantics. Such topics are usually drawn from the following: generalized quantifiers and anaphora, type-shifting, problems of tense and aspect, the linguistic relevance of algebraic approaches to properties, propositions, events and thematic roles, and discourse representation theory.]

**[LING 436 Language Development (also Cognitive Studies 436, Human Development and Family Studies 436, and Psychology 436)]**

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HDFS 633/Ling 700/PSYCH 600, a supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. Offered alternate years. B. Lust.

This course surveys basic issues, methods, and research in the study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental issues of relationships between language and thought are discussed, as are the fundamental linguistic issues of universal grammar and the biological foundations for language acquisition. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child. An optional lab course supplement is available (see COGST 450/LING 450/PSYCH 437).

**[LING 450 Lab Course: Language Development (also Cognitive Studies 450, and Psychology 437)]**

Spring. 2 credits. Prerequisite: concurrent enrollment in either COGST/HDFS/LING/PSYCH 436. B. Lust.

This laboratory course will provide undergraduates with an introduction to hands-on research experience in the Cognitive Studies research labs and will meet once a week in group format. It will include several structured modules dealing with topics covered in the survey course, COGST/HDFS/LING/PSYCH 436, Language Development. They will include training in how to study and

analyze original child language data, including the use of selected portions of a large database of child language data from many languages in the Cornell Language Acquisition Lab (CLAL), and training necessary to the collection and analysis of new child language data. Emphasis will be placed on developing research methods in order to test hypotheses.

**[LING 493 Honors Thesis Research]**

Fall. 4 credits. Staff. May be taken before or after Linguistics 494, or may be taken independently.

**[LING 494 Honors Thesis Research]**

Spring. 4 credits. Staff. May be taken as a continuation of, or before, Linguistics 493.

**[LING 600 Field Methods]**

Spring. 4 credits. Prerequisites: Linguistics 201 and 203 or permission of instructor. V. Carstens, D. Zec.

Elicitation, recording, and analysis of data from a native speaker of a non-Western language not generally known to students.

**[LING 601 Topics in Phonological Theory]**

Spring. 4 credits. Prerequisites: Linguistics 301 and one higher-level course in phonology. A. Cohn. Selected topics in current phonological theory.

**[LING 602 Topics in Morphology]**

Fall. 4 credits. Prerequisites: Ling 301 or 303 or permission of instructor. D. Zec. Selected topics in current morphological theory.

**[LING 604 Research Workshop]**

Fall. 4 credits. S-U grade only. Prerequisite: three or more semesters of graduate study in linguistics. V. Carstens. Participants will present their own ongoing research and discuss it with their colleagues. Individual topics will be chosen on the basis of interest, experience, and probable focus of dissertation research.

**[LING 607 Twentieth-Century Approaches to Language]**

Fall. 4 credits. Prerequisite: at least one course in linguistics or permission of instructor. Offered alternate years. Not offered 1998-99. L. Waugh, M. Bernal. The development of 20th-century approaches to language in America and Europe. Work in 19th-century approaches will also be considered in their relation to 20th-century approaches.]

**[LING 608 Discourse Analysis (also Comparative Literature 618)]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. Lantolf, L. Waugh, H. Tao. Linguistic theory applied to relationships beyond the sentence.]

**[LING 616 Syntax III]**

Fall. 4 credits. Prerequisite: Linguistics 304 or permission of instructor. J. Bowers. An examination of recent developments in syntactic theory, including "minimalist" approaches to phrase structure, derivations/representations and the nature of economy conditions, and parametric differences.



**[LING 633 Seminar in First-Language Acquisition: Cross-linguistic Studies of the Acquisition of Anaphora (also Cognitive Studies 633 and Human Development and Family Studies 633)]**

Fall. 1-4 credits. Prerequisite: Linguistics 436 or equivalent or permission of instructor. Not offered 1998-99. B. Lust.

This seminar will review and critique current theoretical and experimental studies of the first-language acquisition of anaphora, with a concentration on insights gained by cross-linguistic study of this area. The seminar will focus on relating current developments in linguistic theory regarding anaphora to current experimental research on first-language acquisition of anaphora. Attention will also be given to the development of research proposals.]

**[LING 637 Experimental Research for Language Sciences]**

Fall. 4 credits. Not offered 1998-99. Staff. A detailed study of experimental procedures for carrying out research in linguistics, especially in the areas of applied linguistics, phonetics, and language acquisition. Quantitative and qualitative research methods are considered.]

**LING 648 Speech Synthesis by Rule**

Spring. 4 credits. Prerequisite: Linguistics 301, 319, or permission of instructor. Offered alternate years. S. Hertz.

Investigates the nature of the acoustic structure of speech synthesis, using speech as a tool for exploring this structure. A particular acoustic model will be proposed, developed, and motivated by considering the relationship between phonological and acoustic structure, speech timing, phonetic universals, coarticulation, and speech perception. The primary tool for investigation will be the Delta System, a powerful software system for investigating phonology and phonetics through speech synthesis. The course is meant for graduate students and advanced undergraduate students in linguistics, but may also be of interest to students in psychology/psycholinguistics, computer science, and cognitive studies.

**LING 700 Seminar**

Fall or spring, according to demand. Credit to be arranged.

Seminars are offered according to faculty interest and student demand. Topics in recent years have included subject and topic, Montague grammar, speech synthesis, lexicography, classical and autonomous phonology, Japanese sociolinguistics, relational grammar, semantics and semiotics, and others.

**LING 701-702 Directed Research**

701, fall; 702, spring. 1-4 credits. Hours to be arranged. Staff.

**LING 773-774 Proseminar in Cognitive Studies I, II (also Cognitive Studies 773-774, Computer Science 773-774, Philosophy 773-774, Psychology 773-774)**

Fall: R grade; spring: S-U only. 4 credits. Staff.

This year-long seminar is intended to provide graduate students with an interdisciplinary introduction to the study of knowledge, its representation, acquisition, and use.

**Linguistics of Particular Languages**

**Fees:** Depending on the course, a small fee may be charged for photocopied texts for course work.

**African**

**[LING 235 Introduction to African Languages and Linguistics @**

Fall. 3-4 credits variable. Not offered 1998-99. C. Collins.

This is a survey of aspects of language use in Africa. We will discuss the relation between language and culture, the structural characteristics of African languages, and the historical relationships between different African languages.]

**[LING 431 Structure of an African Language]**

Spring. 4 credits. Prerequisite: Linguistics 101 or permission of the instructor. Offered alternate years. Not offered 1998-99. V. Carstens.

A survey of the grammar of an African language in light of current linguistic theory.]

**[LING 514 Syntax of African Languages]**

Spring. 4 credits. Prerequisites: Linguistics 101 and permission of instructor. Not offered 1998-99. V. Carstens.

Selected topics in the syntax of African languages.]

**Arabic**

**[LING 416 Structure of the Arabic Language (also Near Eastern Studies 416) @ #]**

Not offered 1998-99.

For description, see NES 416.]

**Celtic**

**[LING 236 Introduction to Gaelic]**

Spring. 3 credits. Not offered 1998-99. W. Harbert.

This course is an introduction to the history, structure, and current status of the Scottish Gaelic language, oriented around elementary Gaelic texts.]

**[LING 238 Introduction to Welsh (also Welsh 238)]**

Spring. 3 credits. Not offered 1998-99. W. Harbert.

This course surveys the history, structure, cultural and political situation of the Welsh language. It includes several sessions of elementary language instruction and a brief introduction to Welsh literature.]

**[LING 239/539 The Celtic Languages]**

Fall. 4 credits. Graduate students register under Ling 539. Not offered 1998-99. W. Harbert.

This course surveys the history, structure, and political and social situation of the Celtic languages (Welsh, Scottish Gaelic, Irish Gaelic, Breton, Cornish, and Manx). The course includes a few days of introductory language instruction in some of these languages.]

**[LING 437 Celtic Linguistic Structures]**

Fall. 4 credits. Prerequisite: Linguistics 303. Not offered 1998-99. W. Harbert.

This course will treat selected topics in the syntax and morphosyntax of the modern Celtic languages.]

**[LING 623-624 Old Irish I, II]**

623, fall; 624, spring. 4 credits each term. Prerequisite for 624: 623 or permission of instructor. Not offered 1998-99.]

**[LING 625 Middle Welsh]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. W. Harbert.

Students develop a reading knowledge of Middle Welsh through reading prose and poetic texts' with emphasis on prose tales, including the *Mabinogi*.]

**[LING 627 Advanced Old Irish]**

**Chinese**

**[CHIN 427 Structure of the Chinese Language @]**

Fall or spring. 4 credits. Prerequisite: proficiency in Chinese or permission of instructor. Not offered 1998-99. H. Tao.

This course is an introduction to the structure of Chinese and to general issues related to Chinese linguistics. Special attention will be paid to Chinese discourse and pragmatics and to general questions of language use.]

**English**

**LING 217 History of the English Language #**

Spring. 4 credits. W. Harbert.

This course explores the development of the English language from its Indo-European beginnings to the present. Topics covered include changes in sound, vocabulary and grammatical structure, external influences, Old English, Middle English, Standard English, dialects, and World Englishes.

**LING 311 The Structure of English: Demystifying English Grammar**

Spring. 4 credits. C. Collins.

Do you suffer from grammatical insecurity? In foreign language classrooms, do you find yourself at a loss because you don't know how grammatical terminology applies to English? This course will make English grammar accessible and comprehensible to native speakers who want to understand how the language they use so easily works. In addition to standard grammatical notions, the course will consider dialectal variation, matters of style, how sentence structure conveys viewpoint, and other discourse phenomena.

**[LING 649 Structure of Old English]**

Spring. 4 credits. Prerequisite: Ling 441. Offered alternate years. Not offered 1998-99. W. Harbert.

Linguistic overview of Old English, with emphasis on phonology and syntax.]

**French**

**The Major**

The French major has three separate tracks: the literature track, the area studies track, and the linguistics track. The linguistics track is described here; for the literature and area studies tracks, see the description under Romance Studies. The major in French linguistics is designed to give students proficiency in the oral and written language and to develop skills in the linguistic analysis of French.

While prospective majors should try to plan their programs as far ahead as possible, no student will be refused admission merely because of a late start. It is even possible for a student to begin French and/or linguistics at Cornell and become a major. Students are admitted to the major in French linguistics by the director of undergraduate studies of the Department of Romance Studies, Professor Jacques Béraud, but will be guided by their individual advisers.

### The French Linguistics Major

To be admitted to the major, students should have completed Linguistics 101 and French 200, 203, 205, or 213 (or their equivalents) by the end of the sophomore year. It is expected that all students in the major will also take either French 220, 221, or 222, preferably by the end of the sophomore year.

To complete the major, a student must:

- 1) Acquire a sound degree of competence in French. This competence is demonstrated by the successful completion of French 312 (or its equivalent) or by the passing of a special examination. Typically, students in the major will have taken 312 by the end of their junior year.
- 2) Take six courses in French, Romance, and general linguistics (in addition to Linguistics 101). These courses will include at least one course concerning the history of French (e.g., Romance Linguistics 321, French 629 [listed under Romance Studies]), one course concerning the structure of French (e.g., French 405, 408, 410, Linguistics 323), and one other course in French linguistics.
- 3) Take two courses (preferably a sequence) in some allied area, for example, (a) French literature and civilization, (b) psycholinguistics, (c) philosophy of language, (d) French history, culture, music, or history of art or architecture. (This requirement may be waived for students who are double majors in other fields.)

**Honors.** The honors program encourages well-qualified students majoring in French linguistics to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, provides a unique learning opportunity, since it allows for wide reading and extensive rewriting to a degree not practically possible in the case of course papers.

No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have agreed to supervise their work. They may receive course credit by enrolling in French 429-430, but these independent study courses must be taken in addition to the courses that meet the minimum requirements for the major. At the end of the senior year each honors student is examined orally on the honors essay by a jury consisting of his or her faculty adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.

### [FRDML 405 Contemporary Theories of French Grammar

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998-99. L. Waugh.

Selected topics in twentieth-century French linguistics.]

### [FRDML 408 Linguistic Structure of French I

Fall. 4 credits. Prerequisites: qualification in French and Linguistics 101 or Linguistics 400, or permission of instructor. Offered alternate years. Not offered 1998-99. Staff.

A synchronic study and analysis of modern French, with emphasis on its phonology and morphology.]

### [FRDML 410 Linguistic Structure of French II: Semantics, Pragmatics, and Discourse Analysis

Fall. 4 credits. Prerequisite: qualification in French. Offered alternate years. Not offered 1998-99. L. Waugh.

A synchronic study and analysis of modern French, with emphasis on semantics, pragmatics, and discourse analysis.]

### FRDML 700 Seminar in French Linguistics

Spring, according to demand. Credit to be arranged.

Seminars are offered according to faculty interest and student demand. Topics in recent years have included current theories in French phonology, current theories in French syntax, and semantics of French.

### [LING 232 The French Language Today (also French 232)

Fall. 3 credits. Prerequisite: Linguistics 101. Not offered 1998-99. A. Cohn.

Designed for students with a working knowledge of French, this course explores the structure of French and how it is used. The course investigates the sound system, word structure and sentence structure of French as well as different varieties of French, including regional and social variation and formal vs. informal differences.]

## German and Germanic

### [GERLA 404 Modern German Syntax

Spring. 4 credits. Prerequisites: German 304 or equivalent and Linguistics 101 or 303. Not offered 1998-99. M. Diesing.

An application of selected theoretical syntactic models to problems in the syntax of modern German.]

### [GERLA 606 Topics in Historical Germanic Phonology #

Spring. 4 credits. Prerequisite: Ling 441. Not offered 1998-99. W. Harbert.

The development of the sound system from Proto-Germanic to its daughter languages.]

### [GERLA 607 Topics in Historical Germanic Morphology #

Fall. 4 credits. Prerequisite: Ling 441. Not offered 1998-99.

The Germanic verbal system and its Indo-European origins.]

### [GERLA 608 Topics in Historical Germanic Syntax #

Fall. 4 credits. Prerequisite: Ling 441. Not offered 1998-99. W. Harbert.

A diachronic and comparative investigation of syntactic processes in the older Germanic languages.]

### [LING 237 The Germanic Languages (also German 237)

Fall. 4 credits. Not offered 1998-99. W. Harbert, M. Diesing.

This course surveys the history, structure, and use of the modern Germanic languages (English, German, Dutch, Afrikaans, Swedish, Danish, Icelandic, Norwegian, Faroese, and Yiddish).]

### LING 241 Yiddish Linguistics (also Jewish Studies 271)

Fall. 4 credits variable. Prerequisite: Linguistics 101 or permission of instructor. M. Diesing.

This course will cover a wide variety of topics relating to the Yiddish language and Yiddish culture, including the structure of Yiddish, the history of the Yiddish language, Yiddish in America (the Yiddish revival, the role of the Yiddish press, etc.), Yiddish as a minority/dying language, and the influence of Yiddish on present-day American English. No previous knowledge of Yiddish required.

### LING 315-316 Old Norse

315, fall; 316, spring. 4 credits each term. E. Johannsson.

Old Norse is a collective term for the earliest North Germanic literary languages: Old Icelandic, Old Norwegian, Old Danish, and Old Swedish. The richly documented Old Icelandic will be the center of attention, and the purpose is twofold: the student will gain (a) knowledge of an ancient North Germanic language, important from a linguistic point of view, as well as (b) access to the medieval Icelandic (and Scandinavian) literature.

315: The structure of Old Norse (Old Icelandic), phonology, and morphology, with reading of selections from the Prose-Edda, a 13th-century narrative based on the Eddaic poetry. 316: Extensive reading of Old Norse texts, among them selections from some of the major Icelandic family sagas: Njals saga, Grettis saga, and Egils saga, as well as the whole Hrafnkels saga.

### [LING 441 Introduction to Germanic Linguistics

Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. Not offered 1998-99.

Survey of major issues in historical Germanic linguistics.]

### LING 645 Gothic

Spring. 4 credits. Prerequisite: Linguistics 101. Offered alternate years. W. Harbert.

Linguistic structure of Gothic, with extensive readings of Gothic texts.

### [LING 646 Old High German, Old Saxon

Spring. 4 credits. Prerequisite: Linguistics 101. Offered alternate years. Not offered 1998-99. W. Harbert.]

### [LING 649 Structure of Old English #

Fall. 4 credits. Prerequisite: Ling 441. Offered alternate years. Not offered 1998-99. W. Harbert.

Linguistic overview of Old English, with emphasis on phonology and syntax.]

## Greek

### [LING 451 Greek Comparative Grammar (also Classics 421)

Fall. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Greek. Not offered 1998-99. A. Nussbaum.

The prehistory and evolution of the sounds and forms of ancient Greek as reconstructed by comparison with the other Indo-European languages.)

**[LING 455 Greek Dialects (also Classics 425) #**

4 credits. Not offered 1998–99.  
A. Nussbaum.

A survey of the dialects of ancient Greek through the reading and analysis of representative epigraphical and literary texts.]

**[LING 457 Homeric Philology (also Classics 427) #**

Spring. 4 credits. Prerequisite: ability to read Homeric Greek. A. Nussbaum.

The language of the Homeric epics: dialect background, archaisms, modernizations. The notion of a *Kunstsprache*: its constitution, use, and internal consistency. The phonological and morphological aspects of epic compositional technique.

**[LING 459 Mycenaean Greek (also Classics 429) #**

4 credits. Prerequisite: thorough familiarity with the morphology of Classical Greek. Not offered 1998–99.  
A. Nussbaum.

An introduction to the epigraphy, language, and content of the Linear B tablets with special attention to their implications for Greek historical grammar and dialectology.]

**Hungarian****[LING 427 Structure of Hungarian (also Hungarian 427) #**

Fall. 4 credits. Prerequisite: Ling 101 or equivalent. Offered alternate years.  
W. Browne.

Survey of phonology, morphology, and syntax of this non-Indo-European language. Topics to be stressed include vowel harmony, consonant assimilation; definite and indefinite conjugations, possessives, verb prefixes, causatives; focus, word order, clause types, movement, intonation.

**Indo-European****[LING 131–132 Elementary Sanskrit (also Classics 131–132 and Sanskrit 131–132) #**

Not offered 1998–99.

For description, see SANSK 131–132.]

**[LING 251–252 Intermediate Sanskrit (also Classics 251–252 and Sanskrit 131–132) @ #**

For description, see SANSK 131–132.

**[LING 460 Sanskrit Comparative Grammar**

Spring. 4 credits. Prerequisite: reasonable familiarity with the morphology of Classical Sanskrit. A. Nussbaum.

A survey of the historical phonology and morphology of Sanskrit in relation to the Indo-Iranian and Indo-European comparative evidence.

**[LING 617–618 Hittite**

617, fall; 618, spring. 4 credits each term. Prerequisites: for Linguistics 617, permission of instructor; for Linguistics 618, Linguistics 617 or permission of instructor. Not offered 1998–99.]

**[LING 619 Rgveda**

Fall. 4 credits. Not offered 1998–99.  
C. Minkowski.

Reading and linguistic analysis of selected Vedic hymns.]

**[LING 631 Comparative Indo-European Linguistics**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998–99.

An introduction to the comparative grammar of the Indo-European languages.]

**[LING 635–636 Indo-European Workshop**

635, fall; 636, spring. 4 credits each term. Prerequisite: permission of instructor. Not offered 1998–99. A. Nussbaum.

An assortment of subjects intended for students with previous training in Indo-European linguistics: problems in the reconstruction of Proto Indo-European, topics in the historical grammars of the various IE languages, reading and historical linguistic analysis of texts, and grammatical sketches of "minor" IE languages.]

**Italian****[ITALA 403 Linguistic Structure of Italian**

Fall. 4 credits. Prerequisites: Linguistics 101 or equivalent and qualification in any Romance language. Offered alternate years. Not offered 1998–99. C. Rosen.

Survey of Italian syntax, using simple theoretical tools to bring hidden regularities to light. Topics include auxiliaries, modals, clitics, reflexive constructions, agreement, impersonal constructions, causatives.]

**[ITALA 404 History of the Italian Language #**

Spring. 4 credits. Prerequisites: Linguistics 321 and either Italian 201, 203, or equivalent. Offered alternate years. Not offered 1998–99. C. Rosen.

Overview of Italian and its dialects from the earliest texts to the present day. Emergence of the standard language. External history and sociolinguistic circumstances.]

**Japanese****[LING 404 Linguistic Structure of Japanese (also Japanese 414) @ #**

Fall. 4 credits. Prerequisites: Japanese 102 or permission of instructor and Linguistics 101 or equivalent introductory course in linguistics. Offered alternate years. Not offered 1998–99. J. Whitman.

Introduction to the linguistic study of Japanese, with an emphasis on morphology and syntax.]

**[LING 411 History of the Japanese Language (also Japanese 410) @ #**

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998–99. J. Whitman.

An overview of the history of the Japanese language followed by intensive examination of issues of interest to the participants. Students should have a reading knowledge of Japanese.]

**Korean****[LING 430 Structure of Korean (also Korea 430)**

Spring. 4 credits. Offered alternate years. Not offered 1998–99. J. Whitman.

Intensive examination of the syntax and phonology of a non-Indo-European language with the objective of testing principles of

current linguistic theory. No previous knowledge of Korean required.]

**Latin and Italic****[LING 452 Latin Comparative Grammar (also Classics 422)**

Fall. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Latin. A. Nussbaum.

The prehistory and evolution of the sounds and forms of classical Latin as reconstructed by comparison with the other Indo-European languages.

**[LING 454 Italic Dialects (also Classics 424) #**

Fall. 4 credits. A. Nussbaum.

The phonology and morphology of Faliscan, Oscan, and Umbrian studied through the reading of epigraphical texts. Attention to the relations of these languages to Latin and the question of proto-Italic.

**[LING 456 Archaic Latin (also Classics 426) #**

Fall. 4 credits. Prerequisite: reading knowledge of Latin. Not offered 1998–99.  
A. Nussbaum.

Reading of epigraphic and literary preclassical texts with special attention to archaic and dialectal features. The position of Latin among the Indo-European languages of ancient Italy, the rudiments of Latin historical grammar, and aspects of the development of the literary language.]

**Romance****[LING 321–322 History of the Romance Languages (also Lang 321–322) #**

321, fall; 322, spring. 4 credits each term. Prerequisites: Linguistics 101 or equivalent and qualification in any Romance language. Offered alternate years. C. Rosen.

321: Popular Latin. Pan-Romance trends in phonology, morphology, syntax, and the lexicon. Regional divergence. Non-Latin influences. Medieval diglossia and emergence of Romance standards. 322: French, Italian, and Spanish from 850 to 1250 A.D. Analysis of texts. Overview of other languages to the present day. Elements of dialectology.

**[LING 323–324 Comparative Grammar of the Romance Languages (also Lang 323–324)**

323, fall; 324, spring. 4 credits. Prerequisites: Linguistics 101, or equivalent and qualification in any romance language. Offered alternate years. Not offered 1998–99. C. Rosen.

Concise survey of romance syntax, covering the salient constructions in six languages with equal attention to their historical evolution and their current state. Grammatical innovation and divergence in a typological perspective.]

**Russian and Slavic****[LING 417–[418] History of the Russian Language (also Russian 401–402) #**

417, spring; [418]. 4 credits each term. Prerequisites: for Ling 417, permission of instructor; for Ling 418, Ling 417 or equivalent. Offered alternate years.  
W. Browne.

Phonological, morphological, and syntactic developments from Old Russian to modern Russian.

**[LING 443-444 Linguistic Structure of Russian (also Russian 403-404)]**

443, fall; 444, spring. 4 credits each term. Prerequisites: for Linguistics 443, Linguistics 101 and permission of instructor; for Linguistics 444, Linguistics 443 or equivalent. Offered alternate years. Not offered 1998-99. W. Browne.

A synchronic analysis of the structure of modern Russian. Linguistics 443 deals primarily with morphology and its relation to syntax and 444 with syntax and word order. Topics covered include case theory, the functions of word order, voice, agreement, impersonal constructions, negation, nonuniversal categories, and the relation between morphology and syntax.]

**[LING 671-672 Comparative Slavic Linguistics (also Russian 651-652)]**

671, fall; 672, spring. 4 credits each term. Prerequisites: for Linguistics 671, Russian 601 taken previously or simultaneously or permission of instructor; for Linguistics 672, Linguistics 671 or permission of instructor. Offered alternate years. Not offered 1998-99. W. Browne.

Sounds and forms of the Slavic languages and of prehistoric common Slavic; main historical developments leading to the modern languages.]

**[RUSSA 601 Old Church Slavic]**

Fall. 4 credits. This course is prerequisite to Russian 602. Offered alternate years. Not offered 1998-99. W. Browne.

Grammar and reading of basic texts.]

**[RUSSA 602 Old Russian Texts]**

Spring. 4 credits. Prerequisite: Russian 601. Offered alternate years. Not offered 1998-99. W. Browne.

Grammatical analysis and close reading of Old Russian texts.]

**[RUSSA 700 Seminar in Slavic Linguistics]**

Offered according to demand. Variable credit. Not offered 1998-99. Staff.

Topics chosen according to the interests of staff and students.]

## South Asian

**[LING 341 India as a Linguistic Area (also Lang 341)]**

Spring. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. Not offered 1998-99. J. Gair.

A basic introduction to the linguistic and sociolinguistic character of the subcontinent, with special attention to cross-linguistic family influences and convergence.]

**[LING 440 Dravidian Structures (also Lang 440)]**

Fall. 4 credits. Prerequisite: Linguistics 101. Not offered 1998-99. J. Gair.

A comparative and contrastive analysis of the structures of several Dravidian languages.]

**[LING 442 Indo-Aryan Structures (also Lang 442)]**

Fall. 4 credits. Prerequisite: Linguistics 101. Not offered 1998-99. J. Gair.

Typological discussion of the languages of the subfamily. Specific topics and emphasis may vary depending on the interest of the students.]

## Southeast Asian

**[LING 230 Introduction to Southeast Asian Languages and Linguistics (also Lang 230)]**

Fall. 3-4 credits variable. For non-majors or majors. Not offered 1998-99. A. Cohn, J. Wolff.

This is a survey of the languages of Southeast Asia. The goal of this course is to expose students to Southeast Asia as a linguistic area and introduce them to the rich language diversity of the region. It includes three main parts: 1) sociolinguistic and ethnolinguistic issues of language and politics, language and culture, and language use; 2) language structures and typological patterns of the area's languages; 3) historical linguistics, genetic relations between languages, as well as the linguistic effects of language contact and linguistic evidence for prehistory.]

**[LING 653-654 Seminar in Southeast Asian Linguistics]**

653, fall; 654, spring. 4 credits each term. Prerequisite: Linguistics 303 or permission of instructor. Linguistics 653 is not a prerequisite for 654. Not offered 1998-99.

Languages of mainland Southeast Asia. Topics, chosen according to student interests, may include description, dialectology, typology, comparative reconstruction, and historical studies.]

**[LING 655-656 Seminar in Austronesian Linguistics]**

655, fall; 656, spring. 4 credits each term. Prerequisites: for Linguistics 655, Linguistics 101 and permission of instructor; for Linguistics 656, Linguistics 655. Not offered 1998-99. J. Wolff.

Descriptive and comparative studies of Malayo-Polynesian languages.]

**[LING 657-658 Seminar in Austroasiatic Linguistics]**

657, fall; 658, spring. 4 credits each term. Prerequisite: Linguistics 101, 110, or permission of instructor. Not offered 1998-99.

Descriptive and comparative studies of Austroasiatic languages.]

## Spanish

### The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill in the linguistic analysis of Spanish. (For the major in Spanish literature see the description under Romance Studies.) Satisfactory completion of the major should enable students to meet language requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, or to satisfy standards for acceptance into the training programs of the government, social agencies, and business concerns. A Spanish major combined with another discipline may also allow a student to undertake pre-professional training for graduate study in law, medicine, business, etc. Students interested in a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies for Spanish linguistics, Professor Margarita Suñer (218 Morrill Hall).

### The Core

All majors will work out a plan of study in consultation with their advisers. Previous training and interests as well as vocational goals are taken into account when the student's program of courses is determined. Spanish 201 and 204 or 212 (or equivalent) are prerequisite to entering the major in Spanish. All majors normally include the following core courses in their programs:

- 1) Spanish 315-316-318
- 2) Spanish 311 and 312 (or equivalent)

Spanish majors have great flexibility in devising their programs of study and areas of concentration.

### The Linguistic Option

Spanish linguistics, for which the program normally includes at least 20 credits, and at least 8 additional credits in general or Spanish linguistics (such as 366, 405, 407, 408, and others). (Linguistics 101 is recommended before entering this program.) The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.

**Honors.** Honors in Spanish may be achieved by superior students who want to undertake guided independent reading and research in an area of their choice. Students in the senior year select a member of the Spanish faculty engaged in Spanish literature or linguistics to supervise their work and direct the writing of their honors essays (see Spanish 429-430).

**LING 366 Spanish in the United States (also SpanD 366, SpanRom 366, and Latino Studies Program 366)**

Spring. 4 credits. Prerequisite: some knowledge of Spanish. M. Suñer.

Examination of major Spanish dialects in the United States from a linguistic perspective. Contrast with the standard language. Borrowing, interference, and code switching. Syntactic, morphological, and phonological characteristics. Sex-related phenomena.

**[LING 407 Grammatical Structure of Spanish I (also SpanD 407 and SpanRom 407)]**

Spring. 4 credits. Prerequisite: proficiency in Spanish or permission of instructor. Not offered 1998-99. M. Suñer.

This course seeks to equip the advanced student or the future language professional with practical insights into problem areas for foreign language learners with the aid of linguistic descriptions. The intent is to narrow the gap known to exist between the knowledge that a native speaker has and the incomplete one that a foreign language learner possesses.]

**[LING 408 Grammatical Structure of Spanish II (also SpanD 408 and SpanRom 408)]**

Spring. 4 credits. Prerequisites: Linguistics 101 and proficiency in Spanish or permission of instructor. Offered alternate years. Not offered 1998-99. M. Suñer.

Survey of Spanish morpho-syntax using contemporary theoretical models to highlight hidden patterns and generalizations. Topics may vary according to students' interests, but may include major clause types, word order possibilities, negation, agreement, and null categories.]



**[SPAND 405 Hispanic Dialectology**

Spring. 4 credits. Not offered 1998–99.  
Survey of dialects of Latin America and the Caribbean.)

## MATHEMATICS

R. Connelly, chair; G. Bailey, D. Barbasch, A. Berenstein, L. Billera, N. Brady, K. Brown, S. Chase, associate chair and director of undergraduate studies; M. Cohen, R. K. Dennis, P. Diaconis, R. Durrett, E. Dynkin, C. Earle, A. Epstein, M. Erdélyi-Szabó, J. Escobar, R. Farrell, V. Gasharov, L. Gross, M. Gross, J. Guckenheimer, A. Hatcher, D. Henderson, J. Hubbard, J. Hwang, A. Kable, P. Kahn, H. Kesten, M. Morley, A. Nerode, I. Peeva, R. Platek, R. Ramakrishna, T. Rishel, O. Rothaus, L. Saloff-Coste, A. Schatz, S. Sen, R. Shore, R. Sjamaar, J. Smillie, A. Solomon, B. Speh, M. E. Stillman, R. Strichartz, M. Sweedler, M. Terrell, R. Terrell, K. Vogtmann, L. Wahlbin, J. Wang, B. H. West, J. West, D. Wise, (Emeritus: J. Bramble, G. R. Livesay, P. Olum, L. E. Payne, A. Rosenberg)

Mathematics is the language of modern science; basic training in the discipline is essential for those who want to understand, as well as for those who want to take part in, the important scientific developments of our time. Acquaintance with mathematics is also extremely useful for students in the social sciences and valuable for anyone interested in the full range of human culture and the ways of knowing the universe in which we live.

The Department of Mathematics faculty has strong groups specializing in algebra, number theory, real and complex analysis, Lie groups, topology and geometry, logic, probability and statistics, mathematical physics, and applied mathematics. Related departments at Cornell have specialists in computer science, operations research, linear programming, and game theory, and courses in these topics can be integrated readily into the mathematics major.

The department offers a rich variety of undergraduate courses, and many of its beginning graduate courses are suitable for advanced undergraduates as well. Under some conditions, a student may carry out an independent reading and research project for college credit under the supervision of a faculty member.

Members of the department are available to discuss with students the appropriate course for their levels of ability and interest, and students are urged to avail themselves of this help.

Students who want to take any of the courses numbered 300 or above are invited to confer, before registering, with the instructor concerned. The level of a course is indicated by the first digit of the course number: roughly, 1, 2, indicate underclass courses; 3, 4, upperclass courses; 5, professional level and mathematics education courses; 6, 7, graduate courses. The subject matter of courses is often indicated by the second digit: 0, general; 1, 2, analysis; 3, 4, algebra; 5, 6, topology and geometry; 7, probability and statistics; 8, logic; 9, other.

Midterm grades, when required, will be S or U only, except in special circumstances. In

courses with numbers below 700, students will receive letter grades, with the exception of non-mathematics majors who have requested an S-U grade.

### Advanced Placement

Secondary school students are strongly urged to take one of the two advanced placement examinations of the College Entrance Examination Board in their senior year. Freshmen who have had some calculus but who have not taken an advanced placement examination should take the placement examination in mathematics offered at Cornell just before the beginning of classes in the fall. It is most important that anyone with any knowledge of calculus carefully read "Advanced Placement," p. 5.

### The Major

The mathematics major adapts to a number of purposes. It can emphasize the theoretical or the applied. It can be appropriate for professionals and nonprofessionals alike, and can be broad or narrow. It can also be combined easily with serious study in another subject in the physical, biological or social sciences by means of a double major and/or concentration. For example, a double major with mathematics and computer science is facilitated by the concentration in computer science (4b) described below; this concentration permits a student to use certain computer science courses to satisfy the requirements of both majors. Questions concerning the major should be brought to a departmental representative.

**Prerequisites:** The traditional prerequisites are Mathematics 221–222, 223–224 or 293–294. A unit on infinite series is required. Such a unit is offered in Mathematics 112, 122, and 192. Normally students will be admitted to the major only when they have grades of B– or better in all sophomore-level mathematics courses they have taken. Alternative prerequisites are Mathematics 213, 231, normally with grades of B+ or better.

### Requirements

There are five requirements for the major:

- 1) Computer Science 100. Students are urged to take this course before the end of the sophomore year.
- 2) Two courses in algebra. Eligible courses are Mathematics 431 or 433, 432 or 434 or 332, 336.
- 3) Two courses in analysis. Eligible courses are Mathematics 321, 411 or 413, 414, 418, 420, 422, 423, 427, 428.
- 4) Further high-level mathematical courses. Any one of the following is sufficient:
  - a) four additional Mathematics courses numbered 300 or above.
  - b) (Concentration in Computer Science) five additional courses from i) and ii) below, of which at least one is from i) and three are from ii)
    - i) Mathematics courses numbered 300 or above
    - ii) Computer Science courses numbered 310 or above

- c) (Concentration in Operations Research)

five additional courses from iii) and iv) below, of which at least one is from iii) and three are from iv)

- iii) Mathematics courses numbered 300 or above

- iv) courses in Operations Research and Industrial Engineering, typically out of 320–361 (excluding 350) and/or out of 431–472.

- d) (Concentration in Economics) An appointed committee of the Department of Mathematics has recently developed and submitted a plan for a concentration in economics. The plan is available in the Mathematics Department office and on the World Wide Web homepage (<http://math.cornell.edu>). It is expected that, perhaps after some revision, this plan will be approved and adopted in Fall 1998. Meanwhile, students interested in the concentration are encouraged to put together a suitable individual program with the major advisor, using this plan as an example or guideline.

These four alternatives do not exhaust the possibilities. A mathematics major interested in a concentration in a subject different from those above may develop a suitable individual program in consultation with the major advisor.

- 5) One course dealing with mathematical models. Any course from outside mathematics with serious mathematical content and dealing with scientific matters, provided the course has not been used toward satisfying the previous requirement, e.g., Physics 208, 213, or 217 (but not 112 or 207), or Computer Science 211 (if Computer Science option not used above). Students may consider courses from biology, chemistry, economics, and other fields; they should consult their adviser.

A course may be counted toward the mathematics major only if a grade of C– or better is received for that course.

Major advisers can alter these requirements upon request of an advisee, provided the intent of the requirements is met.

### Honors Program

The Department of Mathematics awards honors (cum laude) and high honors (magna cum laude and summa cum laude) to graduating mathematics majors who have demonstrated outstanding ability in the major program.

The awards are determined by the Mathematics Major Committee in the latter part of the semester prior to graduation. Normally, one requirement for honors is participation in the Honors Seminar (Math 401) for one semester, or independent study at a high performance level. The committee will also be looking for excellent performance in mathematics courses, particularly in challenging courses at the 400-level or beyond. Students interested in honors should consult their major advisers concerning suitable courses.

To be considered for high honors, a student usually will be expected to write a Senior Thesis, and present it orally to the department.

This project is carried out during the senior year under the supervision of a member of the Mathematics Department faculty. Students interested in high honors should consult their major advisers and the Mathematics major director during the second semester of their junior year.

### Teacher Education in Agriculture, Mathematics and Science (TEAMS)

Students at Cornell may pursue teaching credentials in biology, chemistry, earth science, general science, mathematics, and physics. TEAMS is a university program jointly conducted by the Departments of Education and Mathematics. Although TEAMS offers options for undergraduate and graduate study, most students enroll in a five-year program, which combines an undergraduate major in mathematics or one of the sciences with a one-year Master of Arts in Teaching (MAT). Students from any college at Cornell are eligible to apply to the program as undergraduates. Students who complete their undergraduate studies and their student teaching are eligible for provisional teaching certification from the State Education Department, effective for five years. Students completing the graduate program can earn the master's degree required for permanent certification.

For more information, contact the TEAMS Student Support Specialist at 255-9255 or the program coordinator, D. Trumbull (Education) 255-3108 or, in Mathematics, A. Solomon 255-3894.

### Distribution Requirement

Virtually all mathematics courses can be used to satisfy the Quantitative and Formal Reasoning part of the Distribution Requirements. Explicit exceptions are noted in the beginning of the Arts and Sciences section of the Courses of Study.

### Basic Sequences

#### Precalculus

| Description  | Course Numbers         |
|--|------------------------|
| 1) Algebra and trigonometry to prepare students for calculus | MATH 109* or EDUC 005* |
| 2) Algebra, analytic geometry, elements of calculus          | EDUC 115**             |

\*MATH 109 and EDUC 005 do not carry credit for graduation.

\*\*Students who want a second semester of mathematics after EDUC 115 may take MATH 105 or if they need more calculus, MATH 111.

#### Calculus

| Description  | Mathematics Course Numbers |
|--|----------------------------|
| 1) Standard three-semester sequence for students who do not expect to take advanced courses in mathematics | 111-112-213                |
| 2) Calculus for engineers (also taken by some physical science majors)                                     | 191(193)-192-293-294       |

3) Prospective mathematics majors and others who expect to take advanced courses in mathematics: many sequences are possible. For example, 111-112-221-222; or 121-122-221-222; or 121-122-223-224; or the engineering sequence 191(193)-192-293-294; or a mix of the above. There is no specifically "approved" basic sequence for mathematics majors. Students should consult with their advisers for each individual case.

Mathematics 191 or 193 may be substituted for 111 in sequences 1 and 3. Sequences 2 and 3 are two-year sequences that include some linear algebra.

Students who take sequence 1 may learn some linear algebra by taking Mathematics 231. A student whose performance in 112 is exceptional may switch to sequence 3 and take 221.

#### Special-Purpose Sequences

| Description  | Mathematics Course Numbers |
|--|----------------------------|
| 1) Finite mathematics and calculus for biology majors      | 105-106                    |
| 2) Other possible finite mathematics and calculus sequence | 105-111                    |

Students who want to take two semesters of calculus are advised to take the first two semesters of one of the three calculus sequences. It is also possible to follow Mathematics 106 with 112 or 122.

*Switching between calculus sequences is often difficult, especially at the 200 level. Students should not attempt such a switch without consulting the associate chair.*

### Courses with Overlapping Content

Because the department offers many courses with overlapping content, students must choose their courses carefully to ensure that they will receive credit for each course they take. Listed below are groups of courses with similar content. Students will receive credit for only one of the courses in each group.

106, 111, 191, 193  
112, 122, 192  
213, 222, 224, 293  
221, 223, 231, 294  
332 and 432  
336 and 436  
321 and 420

#### Fees

In some courses there may be a small fee for computer lab use or for photocopying materials to be handed out to students.

### Summer Courses

A list of mathematics courses usually offered every summer can be found in the School of Continuing Education and Summer Sessions section of this catalog. Students interested in taking summer courses in mathematics should consult the Mathematics Department (255-4013). A tentative summer listing may be available as early as October.

### Undergraduate Course Offerings

Foundation courses: 105, 106, 109, 111, 112, 121, 122, 191, 192, 193, 213, 221, 222, 223, 224, 293, 294

Mathematics Education: 405, 408, 451

History of Mathematics: 403

General and Liberal Arts Courses: 103, 150, 171, 181, 401, 405, 408, 490

Analysis: 411, 413, 414, 418

Algebra and Number Theory: 231, 332, 336, 431, 432, 433, 434, 436

Combinatorics: 441, 442

Geometry and Topology: 150, 356, 451, 452, 453, 454, 455

Probability and Statistics: 171, 471, 472, 474

Mathematical Logic: 181, 481, 482, 483, 486

Applied Analysis and Differential Equations: 321, 420, 422, 423, 425, 427, 428

### MATH 103 Mathematical Explorations

Fall, spring. 3 credits. This course may be used to satisfy the distribution requirement in mathematics.

This course is for students who wish to experience how mathematical ideas naturally evolve. The homework will consist of the students actively investigating mathematical ideas. The course will emphasize ideas and imagination as opposed to techniques and calculations. Topics will vary depending on the instructor. Some assessment will be done through writing assignments.

### MATH 105 Finite Mathematics for Biologists

Fall. 3 credits. Prerequisite: three years of high school mathematics, including trigonometry and logarithms.

Mathematical modeling, sets, functions, and graphing (including use of log and semi-log paper). Probability (with some applications to genetics). Matrices, systems of linear equations, and Markov chains. Examples from biology are used.

### MATH 106 Calculus for Biologists

Spring. 3 credits. Prerequisite: readiness for calculus, such as can be obtained from 3 years of high school mathematics (including trigonometry), or any one of the following Cornell courses: MATH 105, MATH 109, or EDUC 115. Mathematics 111, rather than 106, is recommended for those planning to take 112.\*

Introduction to differential and integral calculus, partial derivatives, elementary differential equations. Examples from biology are used.

### MATH 109 Precalculus Mathematics

Summer. 3 transcript credits only; cannot be used toward graduation.

This course is designed to prepare students for Mathematics 111. Algebra, trigonometry, logarithms, and exponentials are reviewed.

### MATH 111-112 Calculus

Calculus is the study of functions and processes from the point of view of how they are changing. What can we know of a function from the rate at which it changes? What is the cumulative effect of infinitely many infinitesimal changes?

Mathematics 111 and 112 aim to provide, to students with little or no prior exposure to calculus, the knowledge that calculus is *useful*, in that its applications to the physical, biological and social sciences have shaped our

\*See the list of courses with overlapping content at the end of the introduction.

world, and *beautiful*, in that it represents a breathtaking attempt of the human mind to capture the infinitely large and the infinitely small.

These courses seek to provide basic understanding, technical skills and sample applications in various fields for the very broad range of students who take them. Topics are studied (as appropriate) by analytic, numerical and graphical methods. These courses usually have several sections with small-group projects. (See the Supplement to the Course and Room Roster.)

#### MATH 111 Calculus

Fall, spring. 4 credits. Prerequisites: Mathematics 109 or three years of high school mathematics, including trigonometry.\*

Functions and graphs, limits and continuity, differentiation and integration of algebraic, trigonometric, inverse trig, logarithmic and exponential functions. Applications of differentiation, including graphing, max-min problems, tangent line approximation, implicit differentiation, applications to the sciences. The mean value theorem. Antiderivatives, definite and indefinite integrals, the fundamental theorem of calculus, substitution in integration, the area under a curve. Graphing calculators will be used, and their pitfalls will be discussed, as applicable to the above topics.

Mathematics 111 can serve as a one-semester introduction to calculus or as part of a 2-semester sequence in which it is followed by Mathematics 112 or 122.

#### MATH 112 Calculus

Fall, spring. 4 credits. Prerequisites: Mathematics 106 or 111 with a grade of C or better. Those who do well in Mathematics 111 should take 122 instead of 112, unless they plan to continue with 213.\*

Integration: applications, including volumes and arc length; techniques of integration, approximate integration with error estimates, improper integrals, differential equations (separation of variables, initial conditions, systems, some applications). Infinite sequences and series: definition and tests for convergence, power series, Taylor series with remainder. Parametric equations.

#### MATH 121 Honors Calculus

Fall. 4 credits. Prerequisite: three years of high school mathematics with average grade of A- or better, or permission of the department.\*

This is a first-semester course in calculus intended for students who have been quite successful in their previous mathematics courses. The syllabus for the course is quite similar to that of Mathematics 111; however, the approach is more theoretical and the material will be covered in greater depth.

#### MATH 122 Honors Calculus

Fall, spring. 4 credits. Prerequisite: one semester of calculus with a high performance or, permission of the department. Students planning to continue with Mathematics 213 are advised to take 112 instead of this course.\*

Differentiation and integration of elementary transcendental functions, the techniques of integration, applications, polar coordinates,

infinite series, and complex numbers, as well as an introduction to proving theorems. The approach is more theoretical than in Mathematics 112.

#### MATH 150 From Space to Geometry

Fall. 3 credits.

Over the centuries mathematicians have interpreted the concept of "space" in numerous ways. This course will survey some of these approaches from the time of Euclid to the later perspective of non-Euclidean systems. We will evaluate the impact of these viewpoints on such concepts as distance, angle measurement, straightness and curvature, dimension, and surface. We will make and analyze models to get a feel for the concepts and to assess the relevance of various approaches to geometry.

#### MATH 171 Statistical Theory and Application in the Real World

Fall, spring. 4 credits. Prerequisites: high school mathematics.

This introductory statistics course will discuss techniques for analyzing data occurring in the real world and the mathematical and philosophical justification for these techniques. Topics include population and sample distributions, central limit theorem, and statistical theories of point estimation, confidence intervals, and testing hypotheses, the linear model, and the least squares estimator. The course concludes with a discussion of tests and estimates for regression and analysis of variance (if time permits). The computer will be used to demonstrate some aspects of the theory, such as sampling distributions and the Central Limit Theorem. In the lab portion of the course, students will learn and use computer-based methods for implementing the statistical methodology presented in the lectures. (No previous familiarity with the computer is presumed.)

#### [MATH 181 Elementary Logic and Formal Proof

Fall. 3 credits. Prerequisite: high school mathematics. Not offered 1998-99. Expected to be offered 1999-2000.

The course will explore, from an elementary viewpoint, several topics selected by the instructor from the following list: sets and relations, mathematical induction, cardinal numbers and the notion of infinity, formal and informal proofs and their roles in mathematics and computer science, introduction to mathematical logic, applications of formal logic to world problems and puzzles. The course is designed for liberal arts students, including those who may be "math-averse." Rather than providing a systematic treatment of formal logic, it attempts to instill an appreciation for mathematics and its uses, as well as some understanding of the process by which intuitive notions are developed into precise mathematical statements.]

#### MATH 191 Calculus for Engineers

Fall. 4 credits. Prerequisite: three years of high school mathematics, including trigonometry.\*

Plane analytic geometry, differential and integral calculus, and applications. This course is restricted to engineering students who have had no previous successful experience with calculus. Students who have had such experience but wish a first-semester calculus course should take MATH 193.

#### MATH 192 Calculus for Engineers

Fall, spring. 4 credits. Prerequisite: Mathematics 191 or 193.\*

Methods of integration, polar coordinates, complex numbers, infinite series. Introduction to physical vectors and calculus of functions of several variables.

#### MATH 193 Calculus for Engineers

Fall, spring. 4 credits. Prerequisite: three years of high school mathematics including trigonometry, plus some knowledge of calculus.\*

Plane analytic geometry, differential and integral calculus, and applications. Mathematics 193 covers essentially the same topics as 191, but is designed for students with some previous successful experience with calculus.

#### MATH 213 Calculus

Fall, spring. 4 credits. Prerequisite: Mathematics 112, 122, or 192.\*

Vectors, vector-valued functions, line integrals. Multivariable calculus, multiple integrals. First- and second-order differential equations with applications. Introduction to numerical methods, series solutions, systems of differential equations, elementary partial differential equations. The course is designed for students who wish to master the basic techniques of calculus, but whose major will not require a substantial amount of mathematics.

#### MATH 221 Linear Algebra and Calculus

Fall, spring. 4 credits. Prerequisite: two semesters of calculus with a grade of B or better, or permission of instructor.\*

Linear algebra and differential equations. Topics include vector algebra, linear transformations, matrices, linear differential equations, as well as an introduction to proving theorems. This course is especially recommended for students who plan to major in mathematics or in a strongly mathematics-related field.

#### MATH 222 Calculus

Fall, spring. 4 credits. Prerequisite: Mathematics 221.\*

Vector differential calculus, calculus of functions of several variables, multiple integrals. This course is especially recommended for students who plan to major in mathematics or in a strongly mathematics-related field.

#### MATH 223 Honors Linear Algebra and Calculus

Fall. 4 credits. Prerequisites: two semesters of calculus with a grade of A- or better, or permission of instructor.\*

Vectors, matrices and linear transformations; differential calculus of functions of several variables; inverse and implicit function theorems; quadratic forms, extrema, and manifolds; multiple and iterated integrals. Mathematics 223-224 provides an integrated treatment of linear algebra and multivariable calculus designed for students who have been highly successful in their previous calculus courses.

#### MATH 224 Honors Linear Algebra and Calculus

Spring. 4 credits. Prerequisites: Mathematics 223.\*

Vector fields; line integrals; differential forms and exterior derivative; work, flux, and

\*See the list of courses with overlapping content at the end of the introduction.

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density forms; integration of forms over parametrized domains; Green's, Stoke's, and divergence theorems.

### **MATH 231 Linear Algebra**

Spring. 3 credits. Prerequisite: Mathematics 111 or equivalent.\*

Vectors, matrices, and linear transformations, affine and Euclidean spaces, transformation of matrices, and eigenvalues.

### **MATH 281 Deductive Logic (also Philosophy 331)**

Fall. 4 credits.

For description, see PHIL 331.

### **MATH 293 Engineering Mathematics**

Fall, spring. 4 credits. Prerequisites: Mathematics 192 plus a knowledge of computer programming equivalent to that taught in Computer Science 100.\*

Introduction to ordinary differential equations, systems of ordinary linear differential equations. Vector fields and vector calculus. May include computer use in problem solving.

### **MATH 294 Engineering Mathematics**

Fall, spring. 4 credits. Prerequisite: Mathematics 293.\*

Introduction to partial differential equations, Fourier series, and boundary value problems, with applications. Matrix theory and linear algebra, inner product spaces. May include computer use in solving problems.

### **MATH 321 Applicable Analysis**

Fall. 4 credits. Prerequisites: Mathematics 294, or 221 and 222, or 213 and 231. Graduate students who need mathematics extensively in their work and who have had solid courses in calculus and complex variables should take Mathematics 615-616. With less preparation they should take Mathematics 420 (or 321)-422-423.\* (This course was formerly MATH 421 and has a substantial overlap with MATH 420.)

A survey of some of the mathematical techniques that are of primary use in applications to the physical sciences and engineering. The primary mathematical tool explored in harmonic analysis, including Fourier Series, Fourier Integral, Laplace Transform. The applications will be principally to boundary value problems for ordinary and partial differential equations. Moderately advanced mathematics will be used but explained as the course progresses at an elementary level. Much of the formal mathematical material missing in applied courses (e.g., uniform convergence, dominated convergence, complete orthonormal sets) will be thoroughly explained in the course and at the working level.

### **MATH 332 Algebra and Number Theory**

Fall. 4 credits. Prerequisites: Mathematics 221, 231, or 294.\*

Various topics from number theory and modern algebra, usually including most of the following: Primes and factorization, Diophantine equations, congruences, quadratic reciprocity, continued fractions, rings and fields, finite groups, introduction to arithmetic of the Gaussian integers and quadratic fields. Motivation and examples for the concepts of abstract algebra are derived primarily from number theory and geometry.

### **MATH 336 Applicable Algebra**

Spring. 4 credits. Prerequisites: Mathematics 221, 294, or 231.\*

An introduction to concepts and methods of abstract algebra and number theory that are of importance in science and engineering.

Applications of the theory to concrete problems will be stressed. The course treats mathematical topics usually selected from the following list: elementary number theory and congruences, groups, fields, partially ordered sets, lattices, graph theory, Boolean algebras, finite machines and languages. Applications discussed usually include at least some of the following: cryptography, primality testing, elementary coding theory, enumeration problems, fast Fourier transform, difference equations. Additional topics and applications may be chosen by the instructor.

### **MATH 356 Groups and Geometry**

Spring. 4 credits. Prerequisites: Mathematics 221-222, or Mathematics 293-294.

Groups were introduced in the nineteenth century as the set of symmetries of an algebraic or geometric object, and this viewpoint is a central one in modern mathematics. This course studies Euclidean and non-Euclidean (especially hyperbolic) geometry in terms of the groups of symmetries of the relevant spaces. Prior knowledge of groups is not a prerequisite. One aim is to give students experience in modern algebra and geometry (including the geometry of complex numbers) and a sense of the unity of mathematics before they take the 400-level courses. Special care is taken in learning to write proofs. Groups of transformations. Subgroups and cosets. Homomorphisms and isomorphisms. Orbits and fixed points. Frieze groups and wallpaper groups and associated tessellations of the Euclidean plane. Geometry and trigonometry of the hyperbolic plane. Tessellations of the hyperbolic plane.

### **MATH 401 Honors Seminar: Topics in Modern Mathematics**

Spring. 4 credits.

This course is a participatory seminar primarily aimed at introducing senior and junior mathematics majors to some of the challenging problems and areas of modern mathematics. The seminar will help students develop research and expository skills in mathematics, which is important for careers in any field that makes significant use of the mathematical sciences (i.e., pure or applied mathematics, physical or biological sciences, business and industry, medicine). The content will vary from year to year.

### **MATH 403 History of Mathematics #**

Spring. 4 credits. Prerequisites: two courses in mathematics above 300, or permission of instructor.

Survey of the development of mathematics from antiquity to the present, with an emphasis on the achievements, problems, and mathematical viewpoints of each historical period and the evolution of such basic concepts as number, geometry, construction, and proof. Readings from original sources in translation. Students will be required to give oral and written reports.

### **[MATH 405 Mathematical Exposition**

Fall. 3 credits. Not offered 1998-99.

A seminar in mathematics and its applications to other fields. Students are asked to have

had at least two years of college-level mathematics. Course work will consist of discussions, written projects, and student talks. The content of these discussions, projects, and talks will vary, to be determined by the instructor in consultation with the students.]

### **MATH 408 Mathematics in Perspective**

Spring. 4 credits. Prerequisite: consent of instructor (intended for senior mathematics majors and other students with strong mathematics backgrounds).

The purpose of this course is for students to step back and to form an overview of the mathematics they have learned.

### **MATH 411 Introduction to Analysis**

Fall. 4 credits. Prerequisite: Mathematics 222 or 293-294. Students who need measure theory and Lebesgue integration for advanced probability courses should take Mathematics 413-414 or audit the first few weeks of Mathematics 621. Undergraduates who plan to attend graduate school in mathematics should take 413-414.

An introduction to the theory of functions of real variables, stressing concepts and a logical development of the subject rather than applications. Topics include Euclidean spaces, the real number system, continuous and differentiable functions, uniform convergence and approximation theorems, and the Riemann integral. Students who wish to continue study of theoretical analysis upon completion of Mathematics 411 may take, for example, Mathematics 418.

### **MATH 413-414 Honors Introduction to Analysis**

413, fall; 414, spring. 4 credits each.

Prerequisite for 413: Mathematics 222 or 293-294. Prerequisite for Mathematics 414: Mathematics 413.

This sequence, designed for honors students, provides an introduction to the theory of functions of real variables, stressing a rigorous logical development of the subject rather than applications. Topics include metric spaces, the real number system, continuous and differentiable functions, uniform convergence and approximation theorems, Fourier series, Riemann and Lebesgue integrals, calculus in several variables, and differentiable forms.

### **MATH 418 Introduction to the Theory of Functions of One Complex Variable**

Spring. 4 credits. Prerequisite: Mathematics 222 or 294 or 213. May be offered only in alternate years.

A rigorous introduction to complex variable theory. Complex numbers. Differential and integral calculus for functions of a complex variable, including Cauchy's theorem and the calculus of residues. Elements of conformal mapping.

### **MATH 420 Applicable Analysis**

Fall, spring. 4 credits. Prerequisites: high level of performance in Mathematics 294; or 221 and 222; or permission of instructor. Graduate students who need mathematics extensively in their work and who have had solid courses in calculus and complex variables should take Mathematics 615-616. With less preparation they should take Mathematics 420 (or 321)-422-423.\*

Ordinary differential equations in one and higher dimensions: qualitative, analytic, and

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numerical methods, with physical applications. Some important partial differential equations (heat equation, wave equation, and vibrating membrane) and their connections with Fourier series and the Laplacian. Vector calculus and Stokes Theorem, with applications to electromagnetism. Mathematics 420 has substantial overlapping content with Mathematics 321, but more strongly emphasizes the mathematical properties of solutions of ordinary differential equations and the approximation to such solutions by numerical and computer methods.

**MATH 422 Applicable Analysis**

Fall, spring. 4 credits. Prerequisite: Mathematics 420 or 321. Complex variables, Fourier transforms, Laplace transforms. Additional topics may include: An introduction to generalized functions. Applications to partial differential equations.

**MATH 423 Applicable Analysis**

Spring. 4 credits. Prerequisite: Mathematics 420 or 321; however, students who have not taken 422 should talk to the instructor before taking this course. Normed vector spaces. Elementary Hilbert space theory. Projections. Fredholm's alternative. Eigenfunction expansions. Applications to elliptic partial differential equations and to integral equations.

**MATH 425 Numerical Solutions of Differential Equations**

Spring. 4 credits. Prerequisites: Mathematics 222 or 294, one course numbered 300 or higher in mathematics, or permission of instructor. Methods and basic theory for the numerical solution of ordinary and partial differential equations. Linear multistep methods, Runge-Kutta methods, and the problem of stiffness for ordinary differential equations. Finite difference methods and Galerkin finite element methods for partial differential equations. Homework will involve use of a computer.

**MATH 427 Introduction to Ordinary Differential Equations**

Fall. 4 credits. Prerequisite: Mathematics 222 or 294 or permission of instructor. Covers the basic existence, uniqueness, and stability theory together with methods of solution and methods of approximation. Topics include singular points, series solutions, Sturm-Liouville theory, transform methods, approximation methods, and application to physical problems.

**MATH 428 Introduction to Partial Differential Equations**

Spring. 4 credits. Prerequisite: Mathematics 222 or 294 or permission of instructor. Topics selected from first-order quasilinear equations, classification of second-order equations, with emphasis on maximum principles, existence, uniqueness, stability. Fourier series methods, approximation methods.

**MATH 431-432 Introduction to Algebra**

431, fall; 432, spring. 4 credits each. Prerequisite: Mathematics 221 or 231. Prerequisite for Mathematics 432: Mathematics 431 or 433, or permission of instructor. Undergraduates who plan to attend graduate school in mathematics should take 433-434.\*

431: An introduction to linear algebra, including the study of vector spaces, linear transformations, matrices, and systems of linear equations; quadratic forms and inner product spaces; canonical forms for various classes of matrices and linear transformations; determinants. 432: an introduction to various topics in abstract algebra, including groups, rings, fields, factorization of polynomials and integers, congruences, and the structure of finitely generated modules over Euclidean domains with application to canonical forms of matrices.

**MATH 433-434 Honors Introduction to Algebra**

433, fall; 434, spring. 4 credits each. Prerequisite: Mathematics 221 or 231. Prerequisite for Mathematics 434: Mathematics 433 or permission of instructor.

Honors version of Mathematics 431-432. Mathematics 433-434 will be more theoretical and rigorous than 431-432 and will include additional material such as multilinear and exterior algebra.

**MATH 436 Applications of Abstract Algebra**

Spring. 4 credits. Prerequisites: Linear algebra (MATH 231 or higher). Familiarity with elementary algebra or number theory such as MATH 332 would also be helpful.\*

The course is intended for students who would like to learn modern algebra and its applications outside of mathematics. There will be at least as much emphasis on applications as the relevant modern algebra. Frequently, the applications involve or were made possible by the advent of computers. Students who already know the modern algebra covered in the course may still find the applications to be of interest. Specific topics will be chosen by the instructor. The algebra typically includes items drawn from: elementary number theory, polynomials and ring theory, monoids and group theory, real closed fields, algebraic combinatorics, Groebner bases, algebraic geometry, field theory. The applications and related topics typically include items drawn from: complexity theory, coding theory, encryption, discrete and fast Fourier transform, primality testing, factoring integers and polynomials, root counting and isolation, solving systems of polynomial equations, formal language theory and automata.

MATH 336 and 436 may overlap in choice of material. Where they overlap, the coverage in MATH 436 will be of greater depth appropriate to a 400-level course. Students cannot get credit for both MATH 336 and MATH 436.

**[MATH 441 Introduction to Combinatorics**

Fall. 4 credits. Prerequisites: Mathematics 221, 231, or 294. Not offered 1998-99. Enumerative combinatorics: permutation enumeration, stirling and bell numbers, generating functions, exponential formula, Lagrange inversion, recurrences, basic asymptotic methods, rational generating functions. Basic graph theory: trees and Cayley's theorem, chromatic polynomial, eigenvalues and their application. Matching theory: equivalences, marriage theorem, flow problems, totally unimodular matrices. Polya theory: action of a group on a set, Burnside

lemma, DeBruijn's method, applications to graphical enumeration and algorithms.]

**[MATH 442 Introduction to Combinatorics**

Spring. 4 credits. Prerequisites: Mathematics 221, 231, or 294. Not offered 1998-99. Sieves and Mobius Inversion: inclusion/exclusion and its application to enumeration and number theory. Partially ordered sets, abstract Mobius inversion, rudiments of lattice theory. Matroids and combinatorial geometry: Rank function, circuits, bases, application to graph theory and geometry. Combinatorial design: Fisher's inequality, Latin squares, Hadamard matrices, Wilson's theorem on t-designs, application to statistical design. Nonconstructive methods: Ramsey's theorem, Lovasz local lemma, random graphs, application to coding theory. Extremal set theory: Sperner's lemma, Kruskal-Katona and Erdős-Ko-Rado theorems.]

**MATH 451 Euclidean and Spherical Geometry**

Fall. 4 credits. Prerequisite: Mathematics 221 or 231 or permission of instructor. Topics from Euclidean and spherical (non-Euclidean) geometry. A non-lecture, seminar-style course organized around student participation.

**MATH 452 Classical Geometries**

Spring. 4 credits. Prerequisites: Mathematics 221 or its equivalent. This is an introduction to hyperbolic, spherical, and projective geometry—the classical geometries that developed as Euclidean geometry was better understood. For example, the historical problem of the independence of Euclid's fifth postulate is understood when the existence of the hyperbolic plane is realized. Straightedge (and compass) constructions and stereographic projection in Euclidean geometry can be understood within the structure of projective geometry. Topics in hyperbolic geometry include models of the hyperbolic plane and relations to spherical geometry. Topics in projective geometry include homogeneous coordinates and the classical theorems about conics and configurations of points and lines. Optional topics include principles of perspective drawing, finite projective planes, orthogonal Latin squares, and the cross ratio.

**MATH 453 Introduction to Topology**

Fall. 4 credits. Prerequisites: Mathematics 411 and 221, or permission of instructor. Basic point set topology, connectedness, compactness, metric spaces, fundamental group. Application of these concepts to surfaces such as the torus, the Klein bottle, the Moebius band.

**MATH 454 Introduction to Differential Geometry**

Spring. 4 credits. Prerequisites: Mathematics 222 or 294, plus at least one mathematics course numbered 300 or above. Mathematics 453 is not a prerequisite. Differential geometry of curves and surfaces. Curvature, geodesics, differential forms. Introduction to n-dimensional Riemannian manifolds. This material provides some background for the study of general relativity; connections with the latter will be indicated.

\*See the list of courses with overlapping content at the end of the introduction.

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**[MATH 455 Applicable Geometry**

Fall. 4 credits. Prerequisite: Mathematics 221-222 or equivalent, or permission of instructor. Not offered 1998-99.

In general, this course will cover various applicable topics to be chosen from among the geometry of convex bodies, polyhedra, algebraic curves and surfaces, rigid polyhedra, crystallographic patterns, projections and similar topics. Computational aspects of geometry will be included where appropriate.]

**MATH 471 Basic Probability**

Fall. 4 credits. Prerequisite: Mathematics 221. May be used as a terminal course in basic probability. Intended primarily for those who will continue with Mathematics 472.

Topics include combinations, important probability laws, expectations, moments, moment-generating functions, limit theorems. Emphasis is on diverse applications and on development of use in statistical applications. See also the description of Mathematics 671.

**MATH 472 Statistics**

Spring. 4 credits. Prerequisite: Mathematics 471 and knowledge of linear algebra such as taught in Mathematics 221. Some knowledge of multivariate calculus helpful but not necessary.\*

Classical and recently developed statistical procedures are discussed in a framework that emphasizes the basic principles of statistical inference and the rationale underlying the choice of these procedures in various settings. These settings include problems of estimation, hypothesis testing, large sample theory.

**[MATH 474 Basic Stochastic Processes**

Spring. 4 credits. Prerequisites: Mathematics 471 or equivalent and knowledge of linear algebra such as taught in Mathematics 221. Not offered 1998-99.

This is a second-semester undergraduate course on probability. It covers topics from renewal theory, martingales, discrete and continuous time Markov chains, Brownian motion and related diffusion processes, and applications to queueing theory and finance. Theoretical as well as applied aspects of the subject will be emphasized.]

**MATH 481 Mathematical Logic (also Philosophy 431)**

Spring. 4 credits.

Propositional and predicate logic. Classical proof procedures. Completeness and compactness. Decidability and undecidability. The Godel incompleteness theorem. Elements of set theory.

**MATH 482 Topics in Logic (also Philosophy 432)**

Spring. 4 credits. Prerequisites: One logic course from the Mathematics Department at the 200 level or higher, one logic course from the Philosophy Department at the 300 level or higher, or permission of the instructor.

For description, see PHIL 432.

**[MATH 483 Intensional Logic (also Philosophy 436)**

Fall. 4 credits. Prerequisites: one logic course at the 200 level or higher from the Philosophy Department or the Mathematics Department, or permission of instructor. Not offered 1998-99.

For description, see PHIL 436.]

\*See the list of courses with overlapping content at the end of the introduction.

**MATH 486 Applied Logic (also Computer Science 486)**

Spring. 4 credits. Prerequisites: Mathematics 222 or 294; Computer Science 280 or equivalent (such as Mathematics 332, 432, 434, or 481); and some additional course in mathematics or theoretical computer science.

Propositional and predicate logic; compactness and completeness by tableaux, natural deduction, and resolution. Equational logic. Herbrand Universes and unification. Rewrite rules and equational logic, Knuth-Bendix method and the congruence-closure algorithm and lambda-calculus reduction strategies. Topics in Prolog, LISP, ML, or Nuprl. Applications to expert systems and program verification.

**MATH 490 Supervised Reading and Research**

Fall, spring. 1-6 credits.

Supervised reading and research by arrangement with individual professors. Not applicable for material currently available in regularly scheduled courses.

**Professional Level and Mathematics Education Courses****MATH 500 College Teaching**

Fall, weeks 1-6. 1 credit.

Among the topics covered: basic topics about teaching, such as how to plan recitations, how to prepare lesson plans for lectures, exam design and grading, syllabus planning. Also discussed: the structure of colleges and universities, jobs and tenure, professionalism, alternative teaching strategies.

**MATH 503 History of Modern Mathematics**

Spring. 4 credits. Prerequisites: undergraduate algebra and analysis.

Topics in the history of modern mathematics at the level of F. Klein's *Evolution of Mathematics in the 19th Century*, J. Dieudonné's *Abrege D'Histoire Des Mathematiques 1700-1900*, and G. Birkhoff's *Source Book of Classical Analysis*.

**MATH 508 Mathematics for Secondary School Teachers**

Spring. 3-4 credits.

This course will provide direct experience of new approaches, curricula, and standards in mathematics education. Discussion of articles, activities for the secondary classroom, and videotape of classroom teaching will be tied to in-class exploration of math problems. Participants will be expected to keep journals, write short papers, and share ideas in small groups and with the whole class. Optional one credit in the computer lab will examine software environments and their use in the mathematics classroom.

**Graduate Courses**

Graduate-level mathematics courses (formerly 500 and 600 level) have been renumbered to conform to university guidelines regarding course level numbers, p. 5. The level numbers (first digit of the course number) have been raised by one, effective in the fall of 1997. Course content and level of difficulty remain unchanged.

Students interested in taking graduate courses in mathematics should consult the department for further details, times, and possible changes in courses as described below.

**MATH 611-612 Real and Complex Analysis**

611, fall; 612, spring. 4 credits each.

611: measure and integration, functional analysis. 612: complex analysis, Fourier analysis, and distribution theory.

**[MATH 613-614 Topics in Analysis**

613, fall; 614, spring. 4 credits each. Not offered 1998-99. Expected to be offered 1999-2000.]

**MATH 615-616 Mathematical Methods in Physics**

615, fall; 616, spring. 4 credits each.

Intended for graduate students in physics or related fields who have had a strong advanced calculus course and at least two years of general physics. A knowledge of the elements of finite dimensional vector space theory, complex variables, separation of variables in partial differential equations, and Fourier series will be assumed. The course overlaps with parts of Mathematics 420 (or 321)-422-423. Undergraduates will be admitted only with permission of instructor. Mathematics 615 is a prerequisite for 616.

Topics designed to give a working knowledge of the principal mathematical methods used in advanced physics. A brief discussion of some basic notions: metric space, vector space, linearity, continuity, integration. Generalized functions (Schwartz distributions). Fourier series and Fourier integrals. Saddle point method. Linear operators. Differential operators and integral operators, the equations and eigenvalue problems connected with them and the special functions arising from them. Elements of group theory. The rotation group and its representations.

**MATH 617 Dynamical Systems**

Fall. 4 credits.

Topics: existence and uniqueness theorems for ODEs. Poincaré-Bendixon theorem and global properties of two dimensional flows. Limit sets, non-wandering sets, chain recurrence, pseudo-orbits and structural stability. Linearization at equilibrium points: stable manifold theorem and the Hartman-Grobman theorem. Generic properties: transversality theorem and the Kupka-Smale theorem. Examples: expanding maps and Anosov diffeomorphisms. Hyperbolicity: the horseshoe and the Birkhoff-Smale theorem on transversal homoclinic orbits. Rotation numbers: Herman's theorem. Characterization of structurally stable systems.

**MATH 618 Smooth Ergodic Theory**

Spring. 4 credits.

Topics: invariant measures. Entropy. Hausdorff dimension and related concepts. Hyperbolic invariant sets: stable manifolds, Markov partitions and symbolic dynamics. Equilibrium measures of hyperbolic attractors. Ergodic theorems. Pesin theory: stable manifolds of non-hyperbolic systems. Liapunov exponents: relations between entropy, exponents and dimensions.

**MATH 619-620 Partial Differential Equations**

619, fall; 620, spring. 4 credits each.

Basic theory of partial differential equations.

**MATH 621 Measure Theory and Lebesgue Integration**

Fall. 4 credits.

Measure theory, integration, and  $L_p$  spaces.

**MATH 622 Applied Functional Analysis**

Spring. 4 credits.

Basic theory of Hilbert and Banach spaces and operations on them. Applications.

**[MATH 628 Complex Dynamical Systems**

Spring. 4 credits. Prerequisite: Mathematics 418. Not offered 1998–99.

Various topics in the dynamics of analytic mappings in one complex variable, such as: Julia and Fatou sets, the Mandelbrot set, Mañe-Sad-Sullivan's theorem on structural stability. Local theory, including repulsive cycles and the Yoccoz inequality, parabolic points and Ecalé-Voronin invariants, Siegel disks and Yoccoz's proof of the Siegel Brjuno theorem. Quasi-conformal mappings and surgery: Sullivan's theorem on non-wandering domains, polynomial-like mappings and renormalization, Shishikura's construction of Hermann rings. Puzzles, tableaux and local connectivity problems. Thurston's topological characterization of rational functions, the spider algorithm, and mating of polynomials.]

**MATH 631–632–[634] Algebra**

631, fall; 632, spring; 634, spring. 4 credits each. 634 not offered 1998–99. Expected to be offered 1999–2000.

631: finite groups, field extensions, Galois theory, rings and algebras, tensor and exterior algebra. 632: Wedderburn structure theorem, Brauer group, group cohomology. 634: Dedekind domains, primary decomposition, Hilbert basis theorem, local rings.

**[MATH 637 Analytic Number Theory**

Fall. 4 credits. Prerequisites: Mathematics 431, 611, 621. Not offered 1998–99.

Topics: the Prime Number Theorem. Primes in Arithmetic Progressions. The Large Sieve and Some of its Applications.]

**MATH 649 Lie Algebras**

Fall. 4 credits.

Nilpotent, solvable and reductive Lie algebras. Enveloping algebras. Root systems, Coxeter groups. Classification of simple algebras.

**[MATH 650 Lie Groups**

Spring. 4 credits. Not offered 1998–99. Expected to be offered 1999–2000.

Topological groups, Lie groups. Relation between Lie groups and Lie algebras. Exponential map, homogeneous manifolds. Invariant differential operators.]

**MATH 651 Introductory Algebraic Topology**

Spring. 4 credits.

Fundamental group and covering spaces. Homology theories for complexes and spaces.

**MATH 652–653 Differentiable Manifolds**

652, fall; 653, spring. 4 credits each.

Prerequisites: advanced calculus, linear algebra (Mathematics 431), point set topology (Mathematics 453). This is an introduction to differential geometry and differential topology at the level of the beginning graduate student. Topological manifolds. Smooth manifolds, immersions and embeddings, tangent bundles, fiber bundles, vector fields and dynamical systems, Frobenius' theorem. Lie groups. Integration on manifolds, differential forms. Stokes theorem. Connections, Riemannian manifolds, geodesics, curvature, Gauss-Bonnet theorem. Tubular neighborhoods, transversality and cobordism.

**MATH 661 Geometric Topology**

Fall. 4 credits.

An introduction to some of the more geometric aspects of topology and its connections with group theory. Possible topics: surface theory, 3-manifolds, knot theory, geometric and combinatorial group theory, hyperbolic groups, hyperbolic manifolds.

**[MATH 662 Riemannian Geometry**

Spring. 4 credits. Not offered 1998–99. Expected to be offered 1999–2000.

Linear connections, Riemannian metrics and parallel translation. Covariant differentiation and curvature tensors. The exponential map, the Gauss Lemma and completeness of the metric. Isometries and space forms, Jacobi fields and the theorem of Cartan-Hadamard. The first and second variation formulas. The index form of Morse and the theorem of Bonnet-Myers. The Rauch, Hessian, and Laplacian comparison theorems. The Morse index theorem. The conjugate and cut loci. Submanifolds and the Second Fundamental form.]

**MATH 671–672 Probability Theory**

671, fall; 672, spring. 4 credits each.

Prerequisite: a knowledge of Lebesgue integration theory, at least on the real line. Students can learn this material by taking parts of Mathematics 413–414 or 621. Prerequisite for Mathematics 672: Mathematics 671.

Properties and examples of probability spaces. Sample space, random variables, and distribution functions. Expectation and moments. Independence, Borel-Cantelli lemma, zero-one law. Convergence of random variables, probability measures, and characteristic functions. Law of large numbers. Selected limit theorems for sums of independent random variables. Markov chains, recurrent events. Ergodic and renewal theorems. Martingale theory. Brownian motion and processes with independent increments.

**MATH 674 Introduction to Mathematical Statistics**

Spring. 4 credits. Prerequisites: Mathematics 671 or permission of instructor.

Topics include an introduction to the theory of point estimation, consistency, efficiency, sufficiency, and the method of maximum likelihood. Convexity and basic concepts of decision theory are introduced. Concepts of sequential methods may be discussed.

**MATH 681 Logic**

Spring. 4 credits.

Basic topics in mathematical logic, including propositional and predicate calculus; formal number theory and recursive functions; completeness and incompleteness theorems. Other topics as time permits.

**MATH 711–712 Seminar in Analysis**

711, fall; 712, spring. 4 credits each.

**MATH 713 Functional Analysis**

Spring. 4 credits.

Topological vector spaces. Banach and Hilbert spaces, Banach algebras. Additional topics to be selected by instructor.

**[MATH 715 Fourier Analysis**

Spring. 4 credits. Not offered 1998–99. Expected to be offered 1999–2000.]

**MATH 717 Applied Dynamical Systems (also T&AM 776)**

Fall. 4 credits. Suggested prerequisite: T&AM 675, Mathematics 617, or equivalent.

Review of planar (single-degree-of-freedom) systems. Local and global analysis. Structural stability and bifurcations in planar systems. Center manifolds and normal forms. The averaging theorem and perturbation methods. Melnikov's method. Discrete dynamical systems, maps and difference equations, homoclinic and heteroclinic motions, the Smale Horseshoe and other complex invariant sets. Global bifurcations, strange attractors, and chaos in free and forced oscillator equations. Applications to problems in solid and fluid mechanics.

**[MATH 722 Topics in Complex Analysis**

Spring. 4 credits. Not offered 1998–99.

Selections of advanced topics from complex analysis, such as Riemann surfaces, complex dynamics, conformal and quasiconformal mapping. Course content varies.]

**[MATH 728 Seminar in Partial Differential Equations**

Spring. 4 credits. Not offered 1998–99. Expected to be offered 1999–2000.]

**MATH 731–732 Seminar in Algebra**

731, fall; 732, spring. 4 credits each.

**MATH 735 Topics in Algebra**

Fall. 4 credits.

Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.

**MATH 737 Algebraic Number Theory**

Fall. 4 credits.

**MATH 739 Topics in Algebra II**

Spring. 4 credits.

Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.

**MATH 740 Homological Algebra**

Spring. 4 credits.

**MATH 751–752 Seminar in Topology**

751, fall; 752, spring. 4 credits each.

**MATH 753–[754] Algebraic Topology**

753, fall; 754, spring. 4 credits. 754 not offered 1998–99.

The continuation of 651. Cohomology, cup products, Poincaré duality, higher homotopy groups, fiber bundles, fibrations, vector bundles, characteristic classes, K-theory, spectral sequences, cohomology operations.

**MATH 757–758 Topics in Topology**

757, fall; 758, spring. 4 credits each.

Selection of advanced topics from modern algebraic, differential, and geometric topology. Course content varies.

**MATH [761]–762 Seminar in Geometry**

761, fall; 762, spring. 4 credits each. 761 not offered 1998–99.

**[MATH 767 Algebraic Geometry**

Fall. 4 credits. Not offered 1998–99. Expected to be offered 1999–2000.]

**MATH 771–772 Seminar in Probability and Statistics**

771, fall; 772, spring. 4 credits each.

**MATH 777–778 Stochastic Processes**

777, fall; 778, spring. 4 credits each.

**MATH 781-782 Seminar in Logic**  
781, fall; 782, spring. 4 credits each.

**[MATH 783 Model Theory]**  
Spring. 4 credits. Not offered 1998-99.  
Expected to be offered 1999-2000.]

**MATH 784 Recursion Theory**  
Spring. 4 credits.

Theory of effectively computable functions. Classification of recursively enumerable sets. Degrees of recursive unsolvability. Applications to logic. Hierarchies. Recursive functions of ordinals and higher type objects. Generalized recursion theory.

**[MATH 785 Automata Theory]**  
Fall. 4 credits. Prerequisite: Mathematics 481 or similar mathematical logic course at 400-level or higher. Not offered 1998-99.

Basic results in finite and tree automata, including the algebraic approach to these topics. Buchi automata, with applications to computability theory and decidability problems. Rabin automata and their applications to decidability problems, boolean algebras, linear orderings, topology. Applications of automata theory to theoretical computer science in modal and temporal logic and concurrency.]

**[MATH 786 Proof Theory]**  
Fall. 4 credits. Not offered 1998-99.

This course will cover basic ideas and methods of proof theory along with major recent developments motivated by computer science and knowledge presentation theory.

The topics will include Gentzen style and "natural" derivations, normalization theorems for classical and constructive logics, connections with the typed lambda calculus, Curry-Howard isomorphism, arithmetization of proof theory, incompleteness theorems, Loeb's theorem, modal logic of formal provability, models of arithmetic, consistency proofs and normalization theorems in typed lambda calculus.]

**MATH 787 Set Theory**  
Fall. 4 credits.

Models of set theory. Theorems of Gödel and Cohen, recent independence results.

**MATH 788 Topics In Applied Logic**  
Fall. 4 credits.

This course covers applications of the results and methods of mathematical logic to other areas of mathematics and science. Topics vary each year; some recent examples are: automatic theorem proving, formal semantics of programming and specification languages, linear logic, constructivism (intuitionism), non-standard analysis. The student is expected to be familiar with the standard results in graduate level mathematical logic.

**MATH 790 Supervised Reading and Research**  
Fall, spring. 1-6 credits.

**MATH 901-902 Oliver Club Seminar**

**MATH 903-904 Olivetti Club Seminar**

**MATH 905-906 Occasional Seminar on Undergraduate Education**

**MATH 907-908 Seminar in Mathematics Education**

**MATH 911-912 Seminar in Analysis**

**MATH 913-914 Seminar in Dynamics and Geometry**

**MATH 949-950 Seminar in Lie Groups**

**MATH 951-952 Topics in Topology and Geometry**

**MATH 967-968 Seminar in Combinatorial and Algebraic Geometry**

## MODERN LANGUAGES

J. Lantolf, acting chair (206 Morrill Hall);  
D. Cruz de Jesús, associate chair and director of undergraduate studies (209 Morrill Hall);  
C. Rosen, director of graduate relations;  
G. Appel, I. Arnesen, E. Beukenkamp,  
D. Campbell, I. Daly, B. deBary, H. Diffloth,  
E. Dozier, C. Fairbanks, R. Feldman, J. Gair,  
K. Golkowska, A. Grandjean-Levy,  
M. J. Highfield, Z. Iguina, N. Jagacinski,  
M. Johns, A. Jongman, G. Lischke, K. Long,  
T. Lovell, B. Lust, J. Mancusi, M. McCarthy,  
D. McGraw, M. Meyerhoff, L. Morató-Peña,  
S. Oja, J. Oliveira, L. Paperno, S. Paperno,  
N. Pollak, M. K. Redmond, M. Rice,  
J. Routier-Pucci, S. Schaffzin, A. Schwartz,  
K. Selden, J. Sereno, Y. Shirai, C. Sparfel,  
A. Stratakos Tio, R. Sukle, P. Swenson, H. Tao,  
L. Trancik, V. Tsimberov, S. Tun, G. Valk,  
C. Waldron, J. Watkins, L. Waugh, J. Wolff,  
S. Yates

Language is enormously complex and encompasses virtually all areas of human endeavor. Learning individual languages is integral to understanding language itself as well as to understanding other cultures. The Department of Modern Languages is responsible for teaching most of the modern languages taught at Cornell. It coordinates instruction in Spanish, French, Italian, German, Russian, Chinese and Japanese with language, literary, and cultural studies in the departments of Romance Studies, German Studies, Russian Literature, and Asian Studies. The department is also responsible for instruction in some less familiar languages such as Dutch, Swedish, Korean, Hindi, Sinhala, Indonesian, Burmese, Quechua, and many others. In fact, about thirty languages are taught in the department at any one time, a remarkably rich variety. See the listings below under the rubric "Language Courses and Courses about Particular Languages." In addition, the departments of classics, Near Eastern studies, Africana studies, linguistics, and English offer courses in other languages (such as ancient Greek, Latin and Sanskrit, ancient and modern Arabic and Hebrew, Swahili, Old Norse, and Old English). Resources for all language programs include the Center for Language Learning at Noyes Lodge, a state-of-the-art facility where instructors can create high-tech language study materials and students can use them in a beautiful setting on Beebe Lake. In addition to satisfying the College of Arts and Sciences language requirement, some language courses satisfy the college's geographic and historical breadth requirements.

The study of language itself is part of many disciplines and thus is offered in various departments in the College of Arts and Sciences. The Department of Modern Languages focuses on issues germane to the learning of foreign languages. Students who may wish to expand on their language-learning experience can take courses about learning another language. In addition, they can take courses about many of the particular languages, language families, and language

groups taught in the department. These courses deal with structural, historical, textual, social and cultural circumstances of the particular language, language family, or language group, and are taught by faculty in several departments, particularly the Department of Modern Languages and the Department of Linguistics. They are listed below along with the language courses, under the rubric "Language Courses and Courses about Particular Languages, Language Families and Language Groups."

The Department of Modern Languages does not offer a major, but its faculty contributes to a number of different majors in the college. Any student who is interested in language should consult the course of study in the Department of Linguistics. In addition, there is a French linguistics track of the French major and a Spanish linguistics track of the Spanish major (described below under French and Spanish respectively). Our courses are also germane to majors in German Studies, Russian Literature, Asian Studies, and Comparative Literature, as well as to area studies (such as East Asian, Southeast Asian, South Asian, Latin American, Latino, modern European, Russian and East European studies). Finally, many of our courses can be an intellectually exciting complement to curricula in areas as diverse as cognitive studies, psychology, anthropology, sociology, and history. Interested students are welcome to speak with the instructor of a course that seems appealing or to discuss these possibilities with Prof. Lantolf (206 Morrill Hall, 5-0720), as they relate to their interests.

### LANG 390 Independent Study

Fall or spring. 1-4 credits variable.  
Prerequisite: permission of instructor.  
Staff.

Independent study of topics not covered in regular curriculum for undergrads.

### LANG 403 Applied Linguistics and Second Language Learning

Fall. 4 credits. Prerequisite: at least one course in applied linguistics, linguistics, psychology, anthropology, communication, cognitive studies, education or literary analysis; or permission of instructor.  
J. Lantolf.

This course is an introduction to the field of applied linguistics with focus on different domains of language research as they come to bear on the matter of second language learning. Thus, topics include developmental and experimental psychology of language, textual and discourse analysis, literacy, cognitive consequences of bilingualism, corpora and language teaching, contact between first and second language communities.

### [LANG 409 Psycholinguistic Aspects of Second Language Reading]

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. G. Appel.  
In-depth analysis of the research on the reading process in a second language. Topics include processing of narrative vs. expository texts (descriptive, problem solving, causative, etc.); comparison of the reading process in native vs. second languages, and development of methodologies for the teaching of reading in the second-language classroom.]



**LANG 412 Second Language Assessment**

Spring. 4 credits. Prerequisite: permission of instructor. G. Appel.

Teachers are actively and continuously involved in evaluating second language learning and performance. To make responsible and valid decisions about students, courses, and programs, an understanding of the nature of second language assessment is necessary. In this course we will treat concepts, processes, and practices fundamental to language evaluation, such as proficiency, placement; evaluating without tests (portfolios, journals, observations, interviews); reporting results (scores, scales, profiles).

**LANG 414 Second Language Acquisition I**

Fall. 4 credits. Prerequisite: permission of instructor. Y. Shirai.

A survey of the quantitative and qualitative research literature on the acquisition of second, and additional languages, among the adult population. Research carried out in both experimental and natural settings will be considered. Topics include: learner errors and errors analysis; contrastive analysis hypothesis; developmental and variability patterns in the acquisition of syntax, phonology and morphology, including the potential effects of typological and formal universals; pragmatics and discourse; the lexicon, social and cognitive factors in acquisition, communication and learning strategies; theories of second language acquisition.

**[LANG 415 Second Language Acquisition II]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998–99. Y. Shirai.

This course will examine various issues in second language acquisition research that is particularly relevant to foreign language teaching and learning. Topics covered will include: the role of input (listening/reading) vs. output (speaking/writing); implicit vs. explicit learning; negative vs. positive evidence (including the role of error correction); affective factors (motivation, anxiety); individual differences; teachability hypothesis and syllabus construction; the structure of second language proficiency.]

**LANG 420 Approaches to Discourse (also Comparative Literature 421)**

Spring. 4 credits. Prerequisite: at least one course in applied linguistics, linguistics, psychology, sociology, anthropology, or literary analysis, or permission of instructor. H. Tao.

Learning another language entails using that language—that is, being able to create and understand discourse in that language. Interdisciplinary studies demonstrate that there are patterns of language use above the sentence level in ordinary conversation and other types of spoken interaction as well as in written texts of various sorts. This course will introduce the various discourse approaches to language from the fields of anthropology, sociology, cognitive psychology, literary analysis, linguistics, and philosophy and focus on the major insights that have proven to be most helpful in understanding second language learning and language use. The topics to be covered include: narrative structure, conversation structure, rhetorical structure, information flow in discourse, and language and social interaction.

**LANG 425 Corpora and Applied Linguistics**

Fall. 4 credits. Prerequisite: at least one course in applied linguistics, linguistics, psychology, sociology, anthropology, or literary analysis, or permission of instructor. H. Tao.

This course introduces the foundations of studies of language based on large quantities of natural language data, the utility of large corpora for language learning and teaching, and the computational skills needed to carry out applied linguistics research based on language corpora. It will be conducted in both lecture and lab session formats. Topics include: the creation of corpora, coding and tagging of corpora, monolingual vs. parallel corpora, native vs. learner corpora, corpora and language pedagogy, corpora and discourse pragmatics, special issues in East Asian language corpora, corpora and lexicon and grammar.

**[LANG 440 Semiotics and Texts (also Comparative Literature 440 and French Romance 440)]**

Spring. 4 credits. Prerequisites: at least one course in linguistics, psychology, anthropology, sociology, literary analysis, or permission of instructor. L. Waugh.

This course is focused on semiotics as it relates to the construction, function, and interpretation of texts of various sorts. Based on the work of Roman Jakobson and Charles Sanders Pierce and their followers, basic issues will be discussed: different definitions of the sign, structure vs. use of signs, nature of meaning, semiotics of grammar, visual and auditory texts, relation between representation and interpretation, issue of arbitrariness vs. motivation, metaphor as a basic principle of textual design, nature of reasoning, and textual basis of knowledge and beliefs. Specific issues will be addressed such as: differences between literary, scientific, and journalistic texts; special nature of poetic texts; translation between texts; other topics to depend on the interests of the students in the course.]

**LANG 501 Teaching Second Languages**

Fall. 3 credits. Note: this course will count as out-of-college credit for College of Arts and Sciences undergraduates. J. Lantolf and staff.

This course is designed primarily for graduate teaching assistants in the Department of Modern Languages who have no prior experience in the teaching of foreign and second languages. It is also open to others interested in language teaching methodology. The course has a general component relevant to the teaching of all second languages as well as a language-specific component tailored to the pedagogical needs of particular languages. Topics include: observing and reflecting upon the language classroom; principles and research in second-language learning; teaching grammar, pronunciation, and vocabulary; teaching reading, writing, and speaking; teaching for proficiency; discourse and language functions; materials preparations, the task-based syllabus, lesson plans; evaluation and testing, student errors and teacher feedback, portfolios, discrete point and integrative tests; learner attitude, aptitude, motivation, and individual differences; learning strategies; individual and small group activities and collaborative learning; culture in the language classroom; and the role of technology in the language classroom.

**[LANG 609 SLA and the Asian Languages]**

Fall. 4 credits. Prerequisite: Linguistics 414–415 or permission of instructor. Not offered 1998–99. Y. Shirai.

This course will survey the literature on the acquisition of Asian languages both in first and second language. We will mainly focus on Japanese, Korean, Chinese (Mandarin/Cantonese), but other languages (Thai, Malay, Vietnamese, Burmese, Tagalog, etc.) may be dealt with, depending on faculty/student interest.]

**LANG 610 SLA and the Western Languages**

Spring. 4 credits. Prerequisite: LANG 414–415 or permission of instructor. J. Lantolf.

An in depth study of the research literature on second language acquisition which focuses on Spanish, French, and German. Special focus will be on the European Science Foundation Project and Canadian French immersion research, as well as on the experimental research carried out on the three languages. Topics include, morphosyntax, phonology, discourse and pragmatics, the lexicon, and sociolinguistic variables.

**LANG 700 Seminar**

Fall or spring, according to demand. Credit to be arranged. Staff.

Seminars are offered according to faculty interest and student demand. Topics for 1998–99: Grammaticalization and Second Language Acquisition, Input Processing/Hypothesis, Discourse Approaches to Second Language Acquisition.

**LANG 701–702 Directed Research**

701, fall; 702, spring. 1–4 credits. Hours to be arranged. Staff.

**Courses in general linguistics taught by members of the department****LING 319 Phonetics I**

Fall. 4 credits. Prerequisite: Linguistics 201 or permission of instructor. J. Watkins. For description, see Linguistics.

**LING 350 Representing Language: Knowledge Taught and Untaught (also Cognitive Studies 350)**

Fall. 4 credits. J. Gair. For description, see Linguistics.

**LING 405 Sociolinguistics**

Fall. 4 credits. Prerequisite: Linguistics 101, 110, or permission of instructor. M. Meyerhoff.

For description, see Linguistics.

**[LING 607 Twentieth-Century Approaches to Language]**

Fall. 4 credits. Prerequisite: at least one course in linguistics or permission of instructor. Not offered 1998–99.

M. Bernal, L. Waugh.

For description, see Linguistics.]

**[LING 608 Discourse Analysis (also Comparative Literature 618)]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998–99.

J. Lantolf, L. Waugh, H. Tao.

For description, see Linguistics.]

## Relevant Courses Cross-Listed From Other Departments

**LANG 170 Introduction to Cognitive Science (also Cognitive Studies 101, Computer Science 101, Linguistics 170, Philosophy 191 and Psychology 102)**

For description see Psychology.

**LANG 215 Psychology of Language (also Linguistics 215 and Psychology 215)**

For description see Psychology.

**[LANG 379 Culture, Language and Thought (also Anthropology 379)]**

Not offered 1998-99.

For description see Anthropology.]

**LANG 436 Language Development (also Human Development and Family Studies 436, Linguistics 436 and Psychology 436)**

For description see HDFS 436.

**LANG 450 LAB: Language Development (also Cognitive Studies 450, Human Development 450, Linguistics 450, and Psychology 437)**

For description see HDFS 450.

**LANG 633 Seminar in First-Language Acquisition: Cross-linguistic Studies of the Acquisition of Anaphora (also Human Development 633 and Linguistics 633)**

For description see HDFS 633.

**LANG 773-774 Proseminar in Cognitive Studies I, II (also Cognitive Studies 773-774, Linguistics 773-774, Psychology 773-774, Philosophy 773-774, and Computer Science 773-774)**

For description see Psychology.

## Language courses and courses about particular languages, language families, language groups

Courses in foreign literatures as well as certain language courses are taught in the following departments.

Africana Studies and Research Center: Swahili

Asian Studies: Chinese, Japanese, Korean, Sanskrit, Vietnamese

Classics: Greek, Latin

German Studies: German

Near Eastern Studies: Akkadian, Arabic, Egyptian, Hebrew, Sumerian, Ugaritic

Romance Studies: French, Italian, Spanish

Russian Literature: Russian

The Full-year Asian Language CONcentration (FALCON Program) offers intensive instruction in Chinese, Japanese, or Indonesian to students wishing to gain fluency in the language in a single year.

**Fees.** A small fee may be charged for photocopied texts for course work in the courses listed below.

## Arabic

See listings under Near Eastern Studies.

## Bengali

See also courses listed in this section under South Asian Languages.

**BENGL 121-122 Elementary Bengali**

121, fall; 122, spring. 4 credits each term.

Prerequisite: for Bengali 122, Bengali 121 or examination. D. Sudan.

The emphasis is on basic grammar, speaking, and comprehension skills; Bengali script will also be introduced.

**BENGL 201-202 Intermediate Bengali Reading @**

201, fall; 202, spring. 3 credits each term.

Prerequisites: for Bengali 201, Bengali 122 or examination; for Bengali 202, Bengali 201 or examination. D. Sudan.

Continuing instruction in grammar with attention to speaking and reading skills.

**BENGL 203-204 Intermediate Bengali Composition and Conversation @**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Bengali 203, Bengali 122 or examination; for Bengali 204, Bengali 203 or examination. D. Sudan.

Continuing instruction in grammar with attention writing skills.

**BENGL 300 Directed Studies**

Fall or spring. 1-4 credits variable.

Prerequisite: permission of instructor. D. Sudan.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**BENGL 303-304 Bengali Literature I, II**

303, fall; 304, spring. 4 credits each term.

Prerequisites: Bengali 203-204 or equivalent. D. Sudan.

An introduction to noted Bengali writers. Selections of works by Rabindranath Tagore and Abanindranath Tagore and short stories by Bonophul will be covered. The course will be devoted to reading these works and developing literary criticism and creative writing in Bengali.

## Burmese

See also courses listed in this section under Southeast Asian Languages.

**NOTE:** Contact S. Tun in Morrill Hall 405 before classes begin for placement or other testing and organizational information.

**BURM 103-104 Burmese Conversation Practice**

103, fall; 104, spring. 2 credits each term.

Prerequisites: for Burmese 104, Burmese 103 and Burmese 121. May not be taken alone. Must be taken simultaneously with Burmese 121-122. Satisfactory completion of Burmese 104/122 fulfills the qualification portion of the language requirement. S. Tun.

Additional drills, practice and extension of materials covered in Burmese 121 and 122. These courses are designed to be attended simultaneously with Burmese 121-122 respectively, allowing students to obtain qualification within a year.

**BURM 121-122 Elementary Burmese**

121, fall; 122, spring. 4 credits each term.

Prerequisite: for Burmese 122, Burmese 121. May be taken alone or simultaneously with Burmese 103-104. Satisfactory completion of Burmese 104/122 fulfills the qualification portion of the language requirement. S. Tun.

A thorough grounding is given in all language skills: listening, speaking, reading, and writing.

**BURM 123 Continuing Burmese**

Fall. 4 credits. Prerequisite: Burmese 122.

Satisfactory completion of Burmese 123 fulfills the qualification portion of the language requirement. S. Tun.

Continuing instruction in conversational and reading skills, to prepare students for 200-level courses.

**BURM 201-202 Intermediate Burmese Reading @**

201, fall or spring; 202, fall or spring.

3 credits each term. Prerequisites: for Burmese 201, Burmese 123; for Burmese 202, Burmese 201. S. Tun.

Continuing instruction in Burmese, with emphasis on consolidating and extending conversational skills, and on extending reading ability.

**BURM 300 Directed Studies**

Fall or spring. 1-4 credits variable.

Prerequisite: permission of instructor. S. Tun.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**BURM 301-302 Advanced Burmese @**

301, fall or spring; 302, fall or spring.

3 credits each term. Prerequisites: for Burmese 301, Burmese 202 or permission of instructor; for Burmese 302, Burmese 301. S. Tun.

Continuing instruction on conversational and literary skills, but with special emphasis on reading. Students encounter various genres and styles of written Burmese. Readings will include articles on current events, and either several short stories or a novel. Focus is on developing reading skills, particularly on vocabulary development, consolidating and expanding grammar, and appreciating stylistic and cultural differences.

**BURM 303-304 Advanced Burmese II**

303, fall or spring; 304, fall or spring.

3 credits each term. Prerequisite: for Burmese 303, Burmese 202 or permission of instructor; for Burmese 304, Burmese 303. S. Tun.

This is a course for students who have good conversational ability in Burmese and some familiarity with Burmese culture, but who need to strengthen reading skills and further enrich their vocabulary. Students will, in consultation with the instructor, be able to select reading materials. There will also be an opportunity for those who need it, to strengthen listening skills, through the study of current films, TV and radio programs in Burmese.

**BURM 401-402 Directed Individual Study**

401, fall; 402, spring. 2-4 credits variable each term. Prerequisite: permission of instructor. S. Tun.

This course is designed to accommodate the needs of advanced or specialized students, and faculty interests. Topics of reading and

discussion are selected on the basis of student need.

## Cambodian

See Khmer.

## Chinese

For literature courses (conducted in English or Chinese) and Classical Chinese, see Asian Studies.

**NOTE:** Testing for placement, except for those with near-native abilities (particularly those schooled in a Chinese setting up until the age of about 12) takes place in registration week, before classes begin. Time and place will be posted on the Chinese bulletin board opposite Morrill 416. Students with some Chinese schooling who want to obtain 3 or 6 credits for their proficiency will be tested at the beginning of the second week of classes. Again, the time and place will be announced.

### CHIN 101-102 Elementary Standard Chinese ('Mandarin')

101, fall; 102, spring. 6 credits each term. Prerequisite: for Chinese 102, Chinese 101 or equivalent. Since each section is limited to 15-18 students, students missing the first two class meetings without a university excuse are dropped so others may register. No student will be added after the second week of classes. Satisfactory completion of Chinese 102 fulfills the qualification portion of the language requirement. Staff.

A course for beginners or those who have been placed in the course by examination. The course gives a thorough grounding in conversational and reading skills. Students with some facility in the spoken language (because Chinese is spoken at home) but who do not read characters should take 109-110. Students who read Chinese, but who speak 'dialects,' such as Cantonese or Amoy, should consult with the staff before enrolling.

### CHIN 109-110 Beginning Reading and Writing (Standard Chinese)

109, fall; 110, spring. 4 credits each term. Prerequisites: for Chinese 109, basic conversational Chinese ('Mandarin'); if in doubt, take the placement examination; for Chinese 110, Chinese 109 or equivalent. Students who complete Chinese 110 normally continue with Chinese 209 and 210. Because of high demand for this course, students missing the first two meetings without a university excuse are dropped so others may register. Satisfactory completion of Chinese 110 fulfills the qualification portion of the language requirement. F. Lee Mehta.

This course is intended primarily for students who speak some Chinese (e.g., at home), but who have had little or no formal training. The focus is on characters, reading comprehension, basic composition, standard grammar, and reading aloud with standard Chinese ('Mandarin') pronunciation.

### CHIN 111-112 Beginning Cantonese (Spoken)

111, fall; 112, spring. 3 credits each term. Prerequisite: for Chinese 112, Chinese 111 or equivalent. Chinese 111-112 only satisfies the qualification portion of the language requirement if the student can also demonstrate a comparable reading ability. Staff.

A course in conversational standard Cantonese (as spoken in Hong Kong and Canton) for beginners. Students need not have a Mandarin background to take this course, but those with elementary reading skills will also be introduced to Cantonese (character) writing.

### CHIN 113-114 Beginning Reading for Cantonese Speakers

113, fall; 114, spring. 3 credits each term. Prerequisite: everyday conversational ability in Cantonese. Completion of 114 satisfies the qualification portion of the language requirement. Staff.

This course is intended primarily for students who speak some Cantonese (e.g., at home), but who have had little or no formal training in writing. The focus is on characters, reading comprehension, standard grammar, and reading aloud with Cantonese pronunciation.

### CHIN 201-202 Intermediate Standard Chinese ('Mandarin') @

201, fall or summer; 202, spring or summer. 4 credits each term. Prerequisites: for Chinese 201, Chinese 102 with a grade of C+ or above or equivalent; for Chinese 202, Chinese 201 or equivalent. Satisfactory completion of Chinese 201 fulfills the proficiency portion of the language requirement. Staff.

Continuing instruction in written and spoken Chinese with particular emphasis on consolidating basic conversational skills and improving reading confidence and depth.

### CHIN 209-210 Intermediate Reading and Writing @

209, fall; 210, spring. 4 credits each term. Prerequisites: for Chinese 209, Chinese 110 or equivalent; Chinese 210, Chinese 209. Satisfactory completion of 209 fulfills the proficiency portion of the language requirement. After completing 210, students may only take 400-level courses in Chinese. Staff.

Continuing focus on reading and writing for students with spoken background in standard Chinese; introduction of personal letter writing and other types of composition.

### CHLIT 213-214 Introduction to Classical Chinese

For description see Asian Studies.

### [CHIN 215 Mandarin for Cantonese Speakers

Fall or spring. 3 credits each term. Not offered 1998-99.]

### CHIN 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

### CHIN 301-302 High Intermediate Chinese

301, fall; 302, spring. 4 credits each term. Prerequisites: for Chinese 301, Chinese 202 or equivalent; for Chinese 302, Chinese 301. Staff.

Continuing instruction in spoken Chinese and in various genres and styles of written Chinese.

### [CHIN 303-304 Advanced Mandarin Conversation @

303, fall; 304, spring. 1 credit each term. Prerequisite: Chinese 201-202 or equivalent or permission from instructor. S-U grades only. Not offered 1998-99. Staff.

Conversation and reading practice for students who wish to maintain language skills. Guided conversation and oral composition and translation. Corrective pronunciation drills.]

### CHIN 411-412 Advanced Chinese: Fiction, Reportage, Current Events

411, fall; 412, spring. 4 credits each term. Prerequisites: for Chinese 411, Chinese 302 or equivalent; for Chinese 412, Chinese 411. Q. Teng.

Reading, discussion, and composition at advanced levels.

### [CHIN 413-414 Advanced Chinese: Focus on Current Events

413, fall; 414, spring. 3 credits each term. Prerequisites: for Chinese 413, Chinese 412 or equivalent or permission of instructor; for Chinese 414, Chinese 413. S-U grades only. Not offered 1998-99.

Reading and discussion, with a focus on current events. One of the goals of this course is to build reading confidence and speed. The content will partially be determined by student need and interest.]

### [CHIN 425 Special Topics

Fall or spring, according to demand. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.

A number of different topics in advanced Chinese language, advertised the previous semester, will be offered under this title to accommodate the needs of advanced or specialized students, and take advantage of faculty interests. Topics include: correspondence and composition, excerpts from classical novels, Ch'ing documents, xiasheng comedy routines, etc. May be repeated for credit.]

### CHLIT 426 History of the Chinese Language

For description see Asian Studies.

### [CHIN 427 Structure of the Chinese Language

Fall or spring. 4 credits. Prerequisite: proficiency in Chinese, or permission of instructor. Not offered 1998-99. H. Tao.

This course is an introduction to the structure of Chinese and to general issues related to Chinese linguistics. Special attention will be paid to Chinese discourse and pragmatics and general questions of language use.]

## FALCON (Full-year Asian Language CONcentration)

For full information, brochures, etc., see the FALCON secretary 414 Morrill Hall (e-mail: falcon@cornell.edu).

**CHIN 160 Introductory Intensive Mandarin**

Summer only. 8 credits. Completion of 160 fulfills the qualification portion of the language requirement. Staff.

Introduction to spoken and written Mandarin. Lectures on linguistic and cultural matters, intensive practice with native speakers, and laboratory work. Students who complete this course with a grade of at least B are normally eligible to enroll in Chinese 201.

**CHIN 161-162 Intensive Mandarin** @  
161, fall; 162, spring. 16 credits each term. Prerequisites: for Chinese 161, Chinese 160 or equivalent or permission of instructor; for Chinese 162, Chinese 161. Satisfactory completion of Chinese 161 fulfills the proficiency portion of the language requirement. Staff.

**Czech****CZECH 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Dutch****DUTCH 121-122 Elementary Dutch**

121, fall or summer; 122, spring or summer. 4 credits each term. Prerequisite: permission of instructor. M. Briggs.

Intensive practice in listening, speaking, reading, and writing basic Dutch in meaningful contexts. The course also offers insight into Dutch language, culture, and society.

**DUTCH 203 Intermediate Composition and Conversation**

Spring. 3 credits. Prerequisite: qualification in Dutch or permission of instructor. M. Briggs.

Improved control of Dutch grammatical structures and vocabulary through guided conversation, compositions and reading, drawing on all Dutch-speaking cultures.

**DUTCH 204 Intermediate Composition and Conversation**

Fall. 3 credits. Prerequisite: Dutch 203 or permission of instructor. M. Briggs.

This course aims to emphasize written and oral application of accurate, idiomatic Dutch. Reading of authentic material of newspapers, literature, and history, with emphasis on the students' interests and specializations. Taught in Dutch.

**DUTCH 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: proficiency in Dutch or permission of instructor. M. Briggs.

Individualized advanced Dutch studies. This course aims to provide students with individualized programs which can be anything from advanced mastery in any or all skills to the mastery of Dutch for research. Literature history in support of all disciplines. Taught in Dutch.

**English**

See Intensive English Program.

**English for Academic Purposes****ENGLF 205 English as a Second Language**

Fall. 4 credits. Prerequisite: placement by examination. S. Schaffzin.

An all-skills course emphasizing listening and speaking, with some writing practice. Students also meet individually with the instructor.

**ENGLF 206 English as a Second Language**

Spring. 3 credits. Prerequisite: ENGLF 205 or placement by examination. S. Schaffzin.

Designed for those who have completed ENGLF 205 and who need further practice, particularly in writing. Individual conferences are also included.

**ENGLF 209 English as a Second Language**

Fall or spring. 1 credit. Prerequisite: permission of instructor. S. Schaffzin.

Practice in classroom speaking and in informal conversational English techniques for gaining information. Students also practice giving informal presentations. Individual conferences with the instructor supplement class work.

**ENGLF 210 English as a Second Language**

Spring. 1 credit. Prerequisite: permission of instructor. S. Schaffzin.

Practice in academic speaking. Formal classroom discussion techniques and presentation of information in various forms. Individual conferences supplement class work.

**ENGLF 211 English as a Second Language**

Fall, spring, or summer. 3 credits. Prerequisite: placement by examination. D. Campbell.

Academic writing with emphasis on improving organization, grammar, vocabulary, and style through the writing and revision of short papers relevant to students' fields. Frequent individual conferences supplement class work.

**ENGLF 212 English as a Second Language**

Spring. 3 credits. Prerequisite: permission of instructor. Enrollment is restricted to 12 on a first-come, first-served basis. D. Campbell.

Research paper writing. For the major writing assignment of this course, the students must have a real project that is required for the graduate work. This can be a thesis proposal; a pre-thesis; part of a thesis, such as the literature review or discussion section; a paper for another course or a series of shorter papers (with permission of the other instructor); or a paper for publication. Time limitations make it difficult to deal with work over 20 pages in length. Course work involves practice in paraphrase, summary, the production of cohesive, coherent prose, vocabulary use, and grammatical structure. Frequent individual conferences are a necessary part of the course. Separate sections for Social Sciences/Humanities and for Science/Technology.

**ENGLF 213 Written English for Non-Native Speakers**

Spring. 3 credits. Prerequisite: permission of instructor. S. Schaffzin.

Designed for those whose writing fluency is sufficient for them to carry on regular academic work but who want to refine and develop their ability to express themselves clearly and effectively. Individual conferences supplement class work.

**Freshman Writing Seminar****ENGLB 215-216 English for Later Bilinguals**

For description, see freshman writing seminar brochure.

**French**

See also courses listed in this section under Romance Languages.

For information on language placement contact Irene Daly (403A Morrill, 255-0721) and for transfer credit, contact Colette Waldron (403 Morrill Hall, 255-0702). For literature and advanced language courses and information on the literature and area studies tracks of the French major, and on study abroad, see Romance Studies.

**French Major**

The French major has three separate tracks: the literature track, the area studies track, and the linguistics track. The linguistics track is described here; for the literature and area studies tracks, see the description under Romance Studies. The major in French linguistics is designed to give students proficiency in the oral and written language and to develop skills in the linguistic analysis of French.

While prospective majors should try to plan their programs as far ahead as possible, no student will be refused admission merely because of a late start. It is even possible for a student to begin French and/or linguistics at Cornell and become a major. Students are admitted to the major in French linguistics by the director of undergraduate studies of the Department of Romance Studies, Professor Jacques Béraud, but will be guided by their individual advisers.

**The French Linguistic Major**

To be admitted to the major, students should have completed Linguistics 101 and French 213 (or its equivalent) by the end of the sophomore year. It is expected that all students in the major will also take either French Literature 220 or 221, preferably by the end of the sophomore year.

To complete the major, a student must:

- 1) acquire a sound degree of competence in French. This competence is demonstrated by the successful completion of French 312 (or its equivalent) or by passing a special examination. Typically, students in the major will have taken 312 by the end of their junior year.
- 2) take six courses in French, Romance, and general linguistics. These courses will include at least one course concerning the history of French (e.g., Lang 321, listed under Romance Languages, below), one course concerning the structure of French



(e.g., French 405, 408, 410, Lang 323 [listed under Romance Languages, below]), and one other course in French linguistics.

- 3) take two courses (preferably a sequence) in some allied area, for example, (a) French literature and civilization, (b) psychology of language, (c) philosophy of language, (d) French history, culture, music, or history of art or architecture. (This requirement may be waived for students who are double majors in other fields.)

**Honors.** The honors program encourages well-qualified students majoring in French linguistics to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, provides a unique learning opportunity, because it allows for wide reading and extensive rewriting to a degree not practically possible in the case of course papers.

No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have agreed to supervise their work. They may receive course credit by enrolling in French 429-430, but these independent study courses must be taken in addition to the courses that meet the minimum requirements for the major. At the end of the senior year each honors student is examined orally on the honors essay by a jury consisting of his or her faculty adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.

In view of the ongoing curriculum changes in French language courses that will be implemented in 1999-2000, please see David Cruz, director of undergraduate studies, or the Romance Studies undergraduate director. This consultation is especially important in order to know the sequence of courses that will follow the current choice of courses.

#### **FRDML 121 Elementary French**

Fall, spring and summer. 4 credits. Spring enrollment limited. No prerequisites. Students who have studied French for 2 or more years must take the language placement test (LPF). Intended for beginning students or those placed by examination. C. Sparfel.

Small classes provide the opportunity for student interaction and intensive practice in listening to, speaking, reading, and writing basic French in meaningful contexts, which offer insights into French language, culture, and society.

#### **FRDML 122 Elementary French**

Fall or spring. 4 credits. Prerequisite: French 121, LPF score 37-44, or SAT II 370-480. Students who receive an LPF score of 56 after French 122 attain qualification and may enter the 200-level sequence; otherwise, satisfactory completion of French 123 is required for qualification. M. J. Highfield.

The goal of French 122 is to build on the students' elementary knowledge of French so that they can function in basic situations in a French-speaking culture. Courses offer intensive, context-specific practice in speaking, listening, reading, and writing.

#### **FRDML 123 Continuing French**

Fall, spring, or summer. 4 credits. Limited to students who have previously studied French and have an LPF score 45-55 or SAT II 490-590. Satisfactory completion of French 123 fulfills the qualification portion of the language requirement. C. Waldron, I. Daly.

French 123 is an all-skills course designed to improve pronunciation, oral communication, and reading ability; to establish a groundwork for correct writing; and to provide a substantial grammar review. The approach in the course encourages the student to see the language within the context of its culture.

#### **FRDML 200 Intermediate Reading and Writing**

Fall or spring. 3 credits. Prerequisite: qualification in French (French 123, LPF score 56-64, or SAT II 600-680). Satisfactory completion of French 200 fulfills the proficiency portion of the language requirement. S. S. Hnin Tun.

Study of the language in different text types, prose and poetry, articles on current events, and a contemporary novel. Discussion of texts with emphasis on vocabulary development, grammar review and expansion, and appreciation of stylistic levels and cultural differences. Students have the opportunity to select reading material and work on their areas of interest. Taught in French.

#### **FRLIT 201 Introduction to Techniques of Reading French Literature**

For description, see Romance Studies.

#### **FRDML 203 Intermediate Composition and Conversation I**

Fall, spring, or summer. 3 credits. Prerequisite: qualification in French (French 123, LPF score 56-64, or SAT II 600-680). Satisfactory completion of French 203 fulfills the proficiency portion of the language requirement. I. Daly.

Readings, conversation, composition; various other activities based on films, videos, and newspaper articles. The course gives students the opportunity to expand their language skills and to strengthen their knowledge of grammar for better control. Taught in French.

#### **[FRDML 205 Intermediate French: le français multicolore @**

Fall or spring. 3 credits. Prerequisite: qualification in French (French 123, LPF score 56-64, or SAT II 600-680). Satisfactory completion of French 205 fulfills the proficiency portion of the language requirement and can be used to satisfy the breadth requirement. Not offered 1998-99. Staff.

Opportunities to strengthen and expand active language skills within the context of the wider French-speaking world. Contemporary readings, video and audio materials, and people from francophone countries of Europe, Africa, and the Americas will provide bases for individual and group projects. Taught in French.]

#### **FRDML 213 Intermediate Composition and Conversation II**

Fall, spring, or summer. 3 credits. Enrollment limited. Prerequisite: proficiency in French (French 200, 203, or 205), permission of instructor, or placement by Cornell Advanced Standing Examination (CASE) offered by the Department of Modern Languages. This course, or its equivalent, is required for admission to the Cornell Abroad program. A. Grandjean-Lévy.

Emphasis on improving grammatical accuracy and on enriching vocabulary in oral and written expression of French. Varied types of reading including newspaper articles, short videos, films, and presentations by students, provide the basis for writing assignments and class discussions. Themes and emphases may vary from section to section. Taught in French.

**Special section at 9:05:** "French Through Food." A. Grandjean-Lévy. Texts ranging from classic literature to newspaper articles, videos, films, and class discussion will all revolve around one main theme: Food and the French—are they what they eat?

#### **FRLIT 221 Modern French Literature**

For description, see Romance Studies.

#### **[FRDML 232 The French Language Today (also Linguistics 232)]**

Fall. 3 credits. Prerequisite: Linguistics 101. Not offered 1998-99. A. Cohn.

See description under Linguistics.]

#### **FRDML 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

#### **FRROM 301 Advanced French I**

For description, see Romance Studies.

#### **FRDML 303 Le Français de l'Actualité**

Fall only. 4 credits. Prerequisite: Q++ on CASE exam, or French 213, or permission of instructor. A. Grandjean-Lévy.

Analysis of French televised news broadcasts and other media, discussion with native speakers, and numerous related activities place the student at the heart of today's France. Flexible, individualized approach allows each student to perfect language skills and pursue individual interests.

#### **FRDML 305 French through Film**

Fall and spring. 4 credits. Prerequisite: Q++ on CASE exam, French 213, or permission of instructor. C. Waldron.

Analysis of French contemporary films and related readings. Used as a means of studying the language. Particular emphasis on the culture and historical context as it relates to French contemporary society. Additionally, guest speakers will provide enrichment on selected topics.

#### **FRROM 312 Advanced French II**

For description, see Romance Studies.

#### **[FRDML 405 Contemporary Theories of French Grammar]**

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998-99. L. Waugh.

Selected topics in twentieth-century French linguistics.]

#### **[FRDML 408 Linguistic Structure of French I]**

Fall. 4 credits. Prerequisites: qualification in French and Linguistics 101 or Linguistics 400, or permission of instructor. Offered alternate years. Not offered 1998-99. Staff.

A synchronic study and analysis of modern French, with emphasis on its phonology and morphology.]

**[FRDML 410 Linguistic Structure of French II: Semantics, Pragmatics, and Discourse Analysis]**

Fall. 4 credits. Prerequisite: qualification in French. Offered alternate years. Not offered 1998-99. L. Waugh.

A synchronic study and analysis of modern French, with emphasis on semantics, pragmatics, and discourse analysis.]

**FRDML 630 French for Reading—Graduate Students**

Spring only. 3 credits. Limited to graduate students. Staff.

Designed for those with little or no background in French, this course's primary aim is to develop skill in reading French. Grammar basics, extensive vocabulary, and strategies for reading in a foreign language are covered. Some flexibility in selecting texts according to fields of interest is offered.

**[FRDML 700 Seminar in French Linguistics]**

Spring, according to demand. Credit to be arranged. Not offered 1998-99.

Seminars are offered according to faculty interest and student demand. Topics in recent years have included current theories in French phonology, French discourse and pragmatics.]

## German

For literature and culture courses see German Studies.

**The German and German Area Studies Major**

See German Studies for description of the major and for information on study abroad.

**GERLA 121 Elementary German I**

Fall or spring. 4 credits. Intended for students with no prior experience in German or with a language placement test (LPG) score below 37, or an SAT II score below 370. G. Lischke, D. McGraw and staff.

Elementary German I is designed to familiarize students with basic vocabulary and structures so they can communicate about everyday life. Videos and audio tapes facilitate listening comprehension and insight into German culture. Daily practice in section provides the opportunity to learn vocabulary and structures.

**GERLA 122 Elementary German II**

Fall or spring. 4 credits. Prerequisite: German 121, LPG score 37-44, or SAT II 370-450. Students who obtain an LPG score of 56 or above after German 122 attain qualification and may enter a 200-level course; otherwise, successful completion of German 123 is required for qualification. G. Lischke, D. McGraw and staff.

Elementary German II, the second-semester of elementary German, presupposes that students have not yet learned narrative past, subjunctive, passive or dependent word order. Topics include travel, free time, work and the media, including TV, newspaper, film and fiction. There is also discussion of a timeline of key events in Germany from 1917-1989.

**GERLA 123 Continuing German**

Fall or spring. 4 credits. Limited to students who have previously studied German and have an LPG score 45-55 or SAT II 460-570. Satisfactory completion of German 123 fulfills the language qualification requirement. Staff.

German 123 is a course on the beginning intermediate level. Students will further develop their language proficiency by communicating about broadly cultural topics and themes. To provide each student with a maximum opportunity for speaking in German and getting as much help and feedback as possible, much of the work in class will be done in pairs and/or small groups.

**GERLA 200 Contemporary German (also GERST 200)**

Spring. 3 credits. Prerequisite: qualification in German (LPG score of 56-64 or SAT II score of 580-670 or Gerla 123). Successful completion of German 200 fulfills the Arts and Science language proficiency requirement and can be used in partial fulfillment of the Arts and Sciences humanities distribution requirement. G. Appel, G. Valk, B. Buettner and staff.

An intermediate language course designed to provide an introduction to modern German culture and literature while students develop language proficiency. Students examine issues that shape German society, literature and thought as reflected in short stories, poems, socio-cultural and political texts, video and audio materials. Selected themes include "Beyond the Wall: German Unification," "Germany: a Multi-cultural Society," "Speaking and Identity," emphasize accurate and idiomatic expression. Successful completion of the course enables students to continue with more advanced courses in language, literature, and culture. This course replaces GERLA 203 and GERST 201.

**GERST 202 Exploring German Literature**

For description, see German Studies.

**GERLA 204 Intermediate Conversation and Composition**

Fall or spring. 3 credits. Prerequisite: German 203 or Gerst 201, or German/GERST 200, or placement by examination (placement score and CASE). Staff.

Emphasis on improving oral and written expression of idiomatic German. Enrichment of vocabulary and appropriate use of language in different conversational contexts and written genres. Material consists of readings in contemporary prose, articles on current events, videos, and group projects. Topics include: awareness of culture, dependence of meaning on perspective, interviews with native German speakers, German news broadcasts, reading German newspapers on the www, and projects on German Expressionist painters at the Johnson Museum.

**GERLA 205 Business German I**

Fall. 3 credits. Prerequisite: qualification in German (German 123 or an LPG score of 56-64 or an SAT II score between 580-670). Successful completion of GERLA 205 fulfills the language proficiency requirement. G. Lischke.

Learn German and understand German business culture at the same time. This is a German language course that, at the same time, examines the German economic structure and its major components: industry,

trade unions, the banking system, and the government. Participants will learn about the business culture in Germany and how to behave in a work environment, Germany's role within the European Union, the dual education system, the importance of trade and globalization, and current economic issues in Germany. The materials consist of authentic documents from the German business world, TV footage and a Business German textbook.

**GERLA 206 Business German II**

Spring. 3 credits. Prerequisite: proficiency in German (Gerla 205, 203, Gerst 201 or placement by examination (placement score and CASE)). G. Lischke.

This course is a continuation of Gerla 205; however students without previous knowledge of Business German are welcome. This is a German language course that, at the same time, examines the German economic structure and its major components: industry, trade unions, the banking system, and the government will be examined. Participants will learn about the business culture in Germany and how to behave in a work environment, Germany's role within the European Union, the role of the German Bundesbank, the importance of trade and globalization, and current economic issues in Germany. The materials consist of authentic documents from the German business world, TV footage and a Business German textbook. At the end of the course, the external Goethe Institut exam "Deutsch für den Beruf" will be offered.

**GERST 220 Was ist deutsch?**

For description, see German Studies.

**[GERLA 237 The Germanic Languages (also Linguistics 237)]**

Fall. 4 credits. Not offered 1998-99. W. Harbert, M. Diesing.]

**GERLA 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**GERST 301 Mystery and Detective Fiction**

For description, see German Studies.

**GERLA 303 Advanced Conversation and Composition**

Fall or spring. 4 credits. Prerequisite for German 303: GERLA 204, GERST 202, GERST 220, or placement by examination (CASE). G. Valk.

Further enrichment of vocabulary and emphasis on improving students' oral and written style. Study of the language of different text types, including journalistic and literary texts. Discussion of current events provides insight into the historical, political and social issues of German-speaking countries. Individual and group projects provide an opportunity for each student to pursue his/her field of interest and share it with the class.

**[GERLA 304 Advanced Conversation and Composition]**

Spring. 4 credits. Prerequisite: German 303 or placement by examination (CASE). Not offered 1998-99.]

**GERLA 305 German in (Con) Text (also German Studies 305)**

Fall. 4 credits. Prerequisite: GERLA 204, Gerst 202, Gerst 220, or placement by CASE exam. G. Appel.

In this course we will consider language as an activity that mediates all aspects of our social and cultural lives. Therefore, we will examine how German is used to create and reflect human relationships in a range of critical domains such as gender, age, regionalism, nationality, and internationality. Working with spoken and written texts, we will analyze how various aspects of language (grammar, vocabulary, metaphors, idioms, discourse structures) function in constructing these domains and the social relationships that arise in them. Taught in German. Recommended for students interested in high-level language training as well as in the topics to be covered. This course may be counted toward the requirement for 300-level language work in the German major.

**GERLA 306 Zeitungsdeutsch**

Spring. 4 credits. Prerequisite: German 304 or equivalent. G. Lischke.

Analysis of various German daily and weekly newspapers, magazines and German TV with special emphasis on stylistic differences in journalism and discussion of current events. Students have the opportunity to research material for class presentation, lead discussions and share their interests/special fields with the group.

**[GERLA 404 Modern German Syntax**

Spring. 4 credits. Prerequisites: German 304 or equivalent and Linguistics 101 or 303. Not offered 1998-99. M. Diesing.

An application of selected theoretical syntactic models to problems in the syntax of modern German.]

**[GERLA 606 Topics in Historical Germanic Phonology #**

Spring. 4 credits. Prerequisite: Ling 441. Not offered 1998-99. W. Harbert.

The development of the sound system from Proto-Germanic to its daughter languages.]

**[GERLA 607 Topics in Historical Germanic Morphology #**

Fall. 4 credits. Prerequisite: Ling 441. Not offered 1998-99. Staff.

The Germanic verbal system and its Indo-European origins.]

**[GERLA 608 Topics in Historical Germanic Syntax #**

Fall. 4 credits. Prerequisite: Ling 441. Not offered 1998-99. W. Harbert.

A diachronic and comparative investigation of syntactic processes in the older Germanic languages.]

**GERLA 631-632 Academic German I and II**

631, fall; 632, spring. 3 credits each term. Limited to graduate students. Prerequisite: for German 632, German 631 or equivalent. D. McGraw.

Intended primarily for beginners with little or no previous German knowledge. Emphasis in 631 on acquiring basic German reading skills. Emphasis in 632 on development of the specialized vocabulary of student's field of study.

**Modern Hebrew**

See listings under Near Eastern Studies.

**Hindi**

See also courses listed in this section under South Asian Languages.

**HINDI 101-102 Elementary Hindi-Urdu**

101, fall; 102, spring. 6 credits each term.

Prerequisite: for Hindi 102, Hindi 101 or equivalent. C. Fairbanks.

A semi-intensive course for students without prior experience in Hindi-Urdu or a closely related language. A thorough grounding is given in all language skills: listening, speaking, reading, and writing. Students who have had exposure to Hindi-Urdu or a closely related language in the home or otherwise should generally take Hindi 109-110. Check with instructor regarding placement.

**HINDI 109-110 Accelerated Elementary Hindi-Urdu**

109, fall; 110, spring. 3 credits each term.

Prerequisite for Hindi 110: Hindi 109 or equivalent. C. Fairbanks.

An entry-level sequence for students with some prior exposure to Hindi-Urdu or a closely related language. This course sequence will provide a thorough grounding in all the language skills: listening, speaking, reading, and writing. Completion of this sequence, including satisfactory performance on an examination given at the end of Hindi 110, will constitute a level of performance equal to that of the 101-102 sequence, and will thus be considered to fulfill qualification for the language requirement plus eligibility for 200-level Hindi-Urdu courses. Check with instructor regarding placement.

**[HINDI 201-202 Intermediate Hindi Reading @**

201, fall; 202, spring. 3 credits each term.

Prerequisites: for Hindi 201, Hindi 102; for Hindi 202, Hindi 201 or permission of instructor. Not offered 1998-99. C. Fairbanks.]

**HINDI 203-204 Intermediate Composition and Conversation @**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Hindi 203, Hindi 102; for Hindi 204, Hindi 203 or permission of instructor. C. Fairbanks.

Throughout this course sequence all aspects of language learning are practiced: listening, speaking, reading, and writing. In 203, video materials are used and the emphasis is on the conversational aspect of the language. In 204, the focus shifts to reading skills and the main text used is a popular novel.

**HINDI 300 Directed Studies**

Fall or spring. 1-4 credits variable.

Prerequisite: permission of instructor. C. Fairbanks.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**[HINDI 301-302 Advanced Readings in Hindi Literature @**

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Hindi 301, Hindi 202; for Hindi 302, Hindi 301 or equivalent. Not offered 1998-99. C. Fairbanks.

Selected readings in modern Hindi literature.]

**HINDI 303-304 Advanced Composition and Conversation @**

303, fall; 304, spring. 4 credits each term.

Prerequisites: for Hindi 303, Hindi 204 or equivalent; for Hindi 304, Hindi 303 or equivalent. C. Fairbanks.

**[HINDI 305-306 Advanced Hindi Readings @**

305, fall; 306, spring. 4 credits each term.

Prerequisites: for Hindi 305, Hindi 202 or equivalent; for Hindi 306, Hindi 305 or equivalent. Not offered 1998-99.

Intended for those who wish to do readings in history, government, economics, etc., instead of literature.]

**Hungarian****[HUNGR 300 Directed Studies**

Fall or spring. 1-4 credits variable.

Prerequisite: permission of instructor. Not offered 1998-99. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.]

**HUNGR 427 Structure of Hungarian (also Linguistics 427)**

Fall. 4 credits. Prerequisite: Ling 101 or equivalent. Offered alternate years.

W. Browne.

For description, see Linguistics.

**Indonesian**

See also courses listed in this section under Southeast Asian Languages.

For students who have completed Indonesian 121-122-123 or its equivalent there is the option of a one-semester program in Malang, East Java, during the junior year. The program combines a variety of cultural and artistic options with area course work and advanced language study. Complete information is available through Cornell Abroad.

Students who have completed a minimum of 18 credits or the equivalent are eligible to apply for a summer program in the Advanced Indonesian Abroad Program. Further information is available from Professor John Wolff (307 Morrill Hall, 255-0733).

**INDO 121-122 Elementary Indonesian**

121, fall; 122, spring. 4 credits each term.

Prerequisite: for Indonesian 122, Indonesian 121. Staff.

A thorough grounding is given in basic speaking and listening skills with an introduction to reading.

**[INDO 123 Continuing Indonesian**

Fall. 4 credits. Prerequisite: Indonesian 122 or equivalent. Satisfactory completion of Indonesian 123 fulfills the qualification portion of the language requirement. Not offered 1998-99. J. Wolff and staff.

Improves speaking skills, such as fluency and pronunciation, focusing on verbal communication skills; offers a wide range of readings and sharpens listening skills.]

**[INDO 203-204 Intermediate Composition and Conversation**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Indonesian 203, Indonesian 123; for Indonesian 204, Indonesian 203 or permission of instructor. Not offered 1998-99. J. Wolff and staff.]

**INDO 205-206 Intermediate Indonesian @**

205, fall; 206, spring. 3 credits each term.

Prerequisites: for Indonesian 205, Indonesian 123 or equivalent; for Indonesian 206: Indonesian 205 or equivalent. Satisfactory completion of Indonesian 205 fulfills the proficiency portion of the language requirement. Staff.

This course develops all four skills: reading, writing, speaking, and comprehension.

**[INDO 300 Directed Studies**

Fall or spring. 1-4 credits variable.

Prerequisite: permission of instructor. Not offered 1998-99. J. Wolff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.]

**[INDO 301-302 Advanced Readings in Indonesian and Malay**

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Indonesian 301, Indonesian 205-206 or equivalent; for Indonesian 302, Indonesian 301. Not offered 1998-99. J. Wolff and staff.]

**[INDO 303-304 Advanced Indonesian Conversation and Composition**

303, fall; 304, spring. 4 credits each term.

Prerequisites: for Indonesian 303, Indonesian 206; for Indonesian 304, Indonesian 303 or equivalent. Not offered 1998-99. J. Wolff and staff.]

**INDO 305-306 Directed Individual Study**

305, fall; 306, spring. 2-4 credits.

Prerequisites: Indonesian 301-302 and 303-304 or equivalent knowledge of Indonesian or Malay. Staff.

A practical language course on an advanced level in which the students will read materials in their own field of interest, write reports, and meet with the instructor for two hours a week for two credits and twice a week for four credits.

**[INDO 401-402 Advanced Readings in Indonesian and Malay Literature**

401, fall; 402, spring. 4 credits each term.

Prerequisites: for Indonesian 401, Indonesian 302 or equivalent; for Indonesian 402, Indonesian 401 or equivalent. Not offered 1998-99. J. Wolff and staff.]

**FALCON (Full-year Asian Language CONcentration)****[INDO 161-162 Intensive Indonesian**

161, fall; 162, spring. 16 credits each term.

Prerequisite: permission of instructor. Not offered 1998-99. J. Wolff and staff.]

**Italian**

See also courses listed in this section under Romance Languages.

For literature courses and information about study abroad, see Romance Studies.

**The Italian Major**

See Romance Studies.

**ITALA 121-122 Elementary Italian**

121, fall; 122, spring. 4 credits each term.

Prerequisite: for Italian 122, Italian 121 or equivalent. Intended for beginners or students placed by examination. At the end of Italian 122, students who score 56 or higher on the LPI attain qualification

and may enter the 200-level sequence; otherwise Italian 123 is required for qualification. C. Rosen, P. Swenson.

A thorough grounding in all the language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar and cultural information.

**ITALA 123 Continuing Italian**

Fall, spring, or summer. 4 credits. Limited to students who have previously studied Italian and have an LPI score 45-55 or SAT II 460-580. Satisfactory completion of Italian 123 fulfills the qualification portion of the language requirement. Staff.

Italian 123 is an all-skills course designed to improve speaking and reading ability, to establish a groundwork for correct writing, and to provide a substantial grammar review.

**ITALA 203-204 Intermediate Composition and Conversation**

203, fall or spring; 204, fall or spring.

3 credits each term. Prerequisites: for Italian 203, qualification in Italian; for Italian 204, 203 or equivalent. K. Bättig.

Guided conversation, composition, reading, pronunciation, and grammar review emphasizing the development of accurate and idiomatic expression in the language.

*Note: Students placed in 200-level courses also have the option of taking courses in introductory literature; see separate listing under Italian 201 for description of this course, which may be taken concurrently with the Italian 203-204 language courses described above. The introductory literature courses are offered by the respective literature departments, and the 203-204 language courses by the Department of Modern Languages.*

**ITALA 300 Directed Studies**

Fall or spring. 1-4 credits variable.

Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**ITALA 313 Advanced Italian: Language in Italian Culture**

Spring. 3 credits. Prerequisite: Italian 204 or equivalent or permission of instructor. Italian 313 is not prerequisite to Italian 314 and may be taken after Italian 314.

P. Swenson.

Further development of all skills. Readings and discussions center on two themes: (1) contemporary Italian life and (2) the Italian language, its origins, evolution, and present state, including the role of the dialects. Emphasis on vocabulary building and awareness of stylistic levels.

**ITALA 314 Advanced Italian: Language and Social Issues**

Fall. 3 credits. Prerequisite: Italian 204 or equivalent. Italian 313 is not prerequisite to Italian 314 and may be taken after Italian 314. S. Stewart.

Further development of all skills, with emphasis on self-expression. Content: evolution and crisis in Italian politics, values, and national identity against the background of European unification. Social movements, issues, and attitudes, especially as reflected in the mass media.

**[ITALA 403 Linguistic Structure of Italian**

Fall. 4 credits. Prerequisites: Linguistics 101 or equivalent and qualification in any Romance language. Offered alternate years. Not offered 1998-99. C. Rosen.

Survey of Italian syntax, using simple theoretical tools to bring hidden regularities to light. Topics include auxiliaries, modals, clitics, reflexive constructions, agreement, impersonal constructions, causatives.]

**[ITALA 404 History of the Italian Language #**

Spring. 4 credits. Prerequisites: Linguistics 321 and either Italian 201, 203, or equivalent. Offered alternate years. Not offered 1998-99. C. Rosen.

Overview of Italian and its dialects from the earliest texts to the present day. Emergence of the standard language. External history and sociolinguistic circumstances.]

**[ITALA 631 Readings in Italian Opera Libretti**

Spring. 2 credits. For graduate students only.

Prerequisite: permission of instructor. Offered concurrently with appropriate seminars in the Department of Music. Not offered 1998-99.]

**Japanese**

For literature courses see Asian Studies.

**JAPAN 101-102 Elementary Japanese**

101, fall; 102, spring. 6 credits each term.

Prerequisite for Japanese 102: Japanese 101 or placement by the instructor during registration. Intended for beginners or for those who have been placed in the course by examination. Y. Nakanishi-Whitman and staff.

A thorough grounding is given in all the language skills at beginning level: listening, speaking, reading, and writing.

**[JAPAN 123 Accelerated Introductory Japanese**

Fall. 6 credits. Prerequisite: placement by the instructor at beginning of semester.

Not offered 1998-99. Staff.

Accelerated training in listening, speaking, reading, and writing for students who have already acquired a limited facility in Japanese through residence in Japan or brief formal study, but who require additional training to qualify for admission to Japanese 102. Attend Japanese 101 lectures. Offered if enrollment is sufficient.]

**JAPAN 141-142 Beginning Japanese at a Moderate Pace**

141, fall; 142, spring. 4 credits each term.

Y. Shirai and staff.

Beginning-level training in listening, speaking, and reading and writing. This series of "Moderate Pace" courses provides an alternate choice for students who find it difficult to schedule the more intensive 101-102 sequence into their schedules. Can be followed by the 241-242 sequences.

**JAPAN 201-202 Intermediate Japanese Conversation @**

201, fall and summer; 202, spring and summer. 4 credits each term.

Prerequisites: for Japanese 201, Japanese 102 or placement by the instructor during registration; for Japanese 202, Japanese 201 and 203 or placement by the instructor during registration. Y. Katagiri.



**JAPAN 203-204 Intermediate Japanese Reading I @**

203, fall; 204, spring. 2 or 3 credits each term. Prerequisites: for Japanese 203, Japanese 102, Japanese 142 or placement by the instructor during registration; for Japanese 204, Japanese 203 or placement by the instructor during registration.

Y. Kawasaki.

Reading of elementary texts emphasizing practical materials, with development of writing skills.

**JAPAN 241-242 Intermediate Japanese at a Moderate Pace @**

241, fall; 242, spring. 4 credits each term. Prerequisites: for Japanese 241, Japanese 142 or placement by instructor, for Japanese 242, Japanese 241. Y. Kawasaki.

Training in listening, speaking, reading, and writing for those students who have acquired a basic beginning-level command.

**JAPAN 251-252 Elementary/Intermediate Japanese @**

251, fall; 252, spring. 4 credits each term. Prerequisites: for Japanese 251, Japanese 160 or placement by instructor during registration period; for Japanese 252, Japanese 251, 102 or placement by instructor during registration period. Y. Nakanishi-Whitman.

Training in listening, speaking, reading, and writing for those students who have acquired a basic beginning-level command. Provides an alternate choice for students who find it difficult to schedule the more intensive Japanese 201/203 and 202/204 into their schedules: MBA students, engineering students, hotel school students, arts college students, and others identical with 541-552. Can be followed by Japanese 351-352.

**JAPAN 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**JAPAN 301-302 Communicative Competence @**

301, fall; 302, spring. 3 credits each term. Prerequisites: for Japanese 301, Japanese 202 and preferably Japanese 204 or placement by the instructor during registration; for Japanese 302, Japanese 301 or placement by the instructor during registration. Y. Katagiri.

Practice in the use of spoken Japanese with the constraints set by Japanese social settings.

**JAPAN 303-304 Intermediate Japanese Reading II @**

303, fall; 304, spring. 4 credits each term. Prerequisites: for Japanese 303, Japanese 204 or placement by the instructor during registration; for Japanese 304, Japanese 303 or placement by the instructor during registration. K. Selden.

Reading of selected modern texts with emphasis on expository style.

**[JAPAN 351-352 Advanced Japanese at a Moderate Pace @**

351, fall; 352, spring. 4 credits each term. Prerequisites: for Japanese 351, Japanese 252 or placement by instructor during registration period; for Japanese 352, Japanese 351 or placement by instructor during registration period. Not offered 1998-99.

Training in intermediate to advanced listening and speaking, and continued work on reading and writing. Provides an alternate choice for students who find it difficult to schedule the more intensive Japanese 201/203 and 202/204 into their schedules: MBA students, engineering students, hotel school students, arts college students, and others. Also highly recommended for those with prior background in the language who are weak in the more complex and difficult grammar patterns.]

**JAPAN 401-402 Oral Narration and Public Speaking**

401, fall; 402, spring. 2 credits each term. Prerequisites: for Japanese 401, Japanese 302 or placement by the instructor during registration; for Japanese 402, Japanese 401 or placement by the instructor during registration. N. Nakada.

Instruction in making and delivering socially appropriate and effective speeches, with emphasis on both the construction of discourse and Japanese patterns of oral delivery.

**JAPAN 403-404 Advanced Japanese Reading @**

403, fall; 404, spring. 4 credits each term. Prerequisite: Japanese 304 or permission of instructor.

**Section I:** Area of Humanities. Cannot be used for distribution. K. Selden. Reading of selected modern texts with emphasis on expository style.

**Section II:** Area of Economics and Social Science. Cannot be used for distribution. Y. Kawasaki. Reading of selected modern texts with emphasis on expository style.

**JPLIT 406 Introduction to Classical Japanese**

For description see Asian Studies.

**[JAPAN 410 History of the Japanese Language (also Linguistics 411) @ #**

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1998-99. J. Whitman.

An overview of the history of the Japanese language followed by intensive examination of issues of interest to the participants. Students should have a reading knowledge of Japanese.]

**[JAPAN 414 Linguistic Structure of Japanese (also Linguistics 404) @**

Fall. 4 credits. Prerequisites: Japanese 102 or permission of instructor and Linguistics 101 or equivalent introductory course in linguistics. Offered alternate years. Not offered 1998-99. J. Whitman.

Introduction to the linguistic study of Japanese, with an emphasis on morphology and syntax.]

**JAPAN 421-422 Directed Readings**

421, fall; 422, spring. Credit to be arranged. Limited to advanced students. Prerequisite: placement by the instructor during registration. K. Selden.

Topics are selected on the basis of student needs.

**JAPAN 551-552 Intermediate Japanese for Business School Students**

551, fall; 552, spring. 4 credits each term. Prerequisites: for Japanese 551, Japanese 160, and permission of instructor or placement by instructors during registration period; for Japanese 552, Japanese 551, 102, or placement by instructors during registration. Y. Nakanishi-Whitman.

Training in listening, speaking, reading, and writing for students who have already acquired a basic oral proficiency. Course times are arranged to accommodate those in the MBA program, but the material is oriented toward any student. Particularly suited to students who find it difficult to schedule the more intensive 201/203 or 202/204 courses into their schedules.

**[JAPAN 555-556 Advanced Japanese for Business School Students**

555, fall; 556, spring. 4 credits each term. Prerequisites: for Japanese 555, Japanese 552 or placement by instructors during registration period; for Japanese 556, Japanese 555 or placement by instructors during registration period. Not offered 1998-99. Staff.

Training in listening and speaking at intermediate to advanced level; continued work on reading and writing at intermediate level. Course times are arranged to accommodate those in the MBA program, but the material is oriented toward any student. Particularly suited to students who find it difficult to schedule the more intensive 202/204 courses into their schedules.]

**FALCON (Full-year Asian Language Concentration)**

R. Sukle, 412 Morrill Hall; FALCON secretary, 414 Morrill Hall

**JAPAN 160 Introductory Intensive Japanese**

Summer only. 8 credits. R. Sukle and staff.

This is the first term of the Japanese FALCON Program. It is a full-time, nine-week course; the degree of intensity does not allow students to take other courses simultaneously. Formal application must be made to the program, but admission is open to all students, not just those students intending to take the fall and spring terms of FALCON. The course is an introduction to Japanese from absolute beginning level, in speaking as well as rudimentary reading and writing. There are three small interactive classes per day conducted entirely in Japanese and one lecture in English and Japanese. Two hours during the day are required language labs. Additional preparation time in the language lab is necessary in the evenings. Students completing this course can move smoothly in the academic year into Japanese 251-252 or 551-552. These can be followed the following year by Japanese 351-352 or Japanese 555-556, respectively.

**JAPAN 161-162 Intensive Japanese (FALCON)**

161, fall; 162, spring. 16 credits each term. Prerequisites: for Japanese 161, Japanese 160 or Japanese 102 at Cornell, or placement prior to beginning of fall term by FALCON staff; for Japanese 162, Japanese 161, or placement prior to beginning of spring term by FALCON program. Students must apply formally to the program (applications available from FALCON secretary, 414 Morrill Hall). Admission is open to graduate and undergraduate students from Cornell or from elsewhere, provided the applicant has the necessary prerequisites or is able to place into this level.

Work on spoken and written Japanese from intermediate into advanced level. This is a full-time program and a full academic load; the demands of the program do not normally permit students simultaneously to take other courses. With the sequence 160-161-162 a student can, in one calendar year complete as much Japanese as would be in three or more years of part-time study in many academic programs. This course also serves to fulfill the language requirement for the MA in Asian Studies and the joint MBA/MA in Asian Studies.

## Japanese

See also courses listed in this section under Southeast Asian Languages.

### [JAVA 131-132 Elementary Japanese

131, fall; 132, spring. 3 credits each term. Prerequisite: for Japanese 132, Japanese 131 or equivalent. This language series (131-132) cannot be used to satisfy the language requirement. Not offered 1998-99. J. Wolff and staff.

An elementary language course for those who have had no previous experience in the language.]

### [JAVA 133-134 Continuing Japanese

133, fall; 134, spring. 3 credits each term. Prerequisites: for Japanese 133, Japanese 132 or equivalent; for Japanese 134, Japanese 133 or equivalent. Satisfactory completion of Japanese 134 fulfills the qualification portion of the language requirement. Not offered 1998-99. J. Wolff and staff.

An intermediate conversation and reading course.]

### [JAVA 203-204 Directed Individual Study

203, fall; 204, spring. 3 credits. Prerequisite: Japanese 134 or equivalent. Not offered 1998-99. J. Wolff and staff.

This is a practical language course on an intermediate level in which the students will work through readings and conversations under the guidance of a native speaker for three contact hours a week.]

### [JAVA 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Not offered 1998-99. J. Wolff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.]

## Khmer (Cambodian)

See also courses listed in this section under Southeast Asian Languages.

### KHMER 101-102 Elementary Khmer

101, fall; 102, spring. 6 credits each term. Prerequisite: for Khmer 102, Khmer 101 or equivalent. Staff.

A course for beginners or for those who have been placed in the course by examination. The course gives a thorough grounding in speaking and reading.

### KHMER 201-202 Intermediate Khmer Reading @

201, fall; 202, spring. 3 credits each term. Prerequisites: for Khmer 201, Khmer 102; for Khmer 202, Khmer 201. Staff.

Continuing instruction in spoken and written Khmer.

### KHMER 203-204 Intermediate

#### Composition and Conversation @

203, fall; 204, spring. 3 credits each term. Prerequisites: for Khmer 203, Khmer 102; for Khmer 204, Khmer 203. Staff. Letter writing and other forms of composition.

### KHMER 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

### KHMER 301-302 Advanced Khmer @

301, fall; 302, spring. 4 credits each term. Prerequisites: for Khmer 301, Khmer 202 or equivalent; for Khmer 302, Khmer 301. Staff.

Continuing instruction in spoken and written Khmer; emphasis on enlarging vocabulary, increasing reading speed, and reading various genres and styles of prose.

### KHMER 401-402 Directed Individual Study

401, fall; 402, spring. For advanced students. 2-4 credits each term. Prerequisite: permission of instructor. Staff. Various topics according to need.

## Korean

**Fees.** A small fee may be charged for photocopied texts for course work.

### KOREA 101-102 Elementary Korean

101, fall; 102, spring. 6 credits each term. Satisfactory completion of Korean 102 fulfills the qualification portion of the language requirement. H. Diffloth and staff.

Covers basics of speaking, reading, and writing. Introduces Hangeul writing system and grammar.

### KOREA 109-110 Elementary Reading

109, fall; 110, spring. 3 credits each term. Prerequisite: permission of instructor. Satisfactory completion of Korean 110 fulfills the qualification portion of the language requirement. H. Diffloth and staff.

This course is for students who have spoken some Korean in the home, but whose reading and writing skills are limited or nonexistent. If in doubt about eligibility, see instructor.

### KOREA 201-202 Intermediate Korean @

201, fall; 202, spring. 4 credits each term. Prerequisites: for Korean 201, Korean 102 or permission of instructor; for Korean 202, Korean 201. Satisfactory completion of Korean 201 fulfills the proficiency portion of the language requirement. H. Diffloth and staff.

Covers the basics of speaking, reading, and writing at the intermediate level. Introduces some reading and writing with Chinese characters.

### KOREA 209-210 Intermediate Reading

209, fall; 210, spring. 4 credits each term. Prerequisites: for Korean 209, Korean 110 or permission of instructor; for Korean 210, Korean 209 or permission of instructor. Satisfactory completion of Korean 209 fulfills the proficiency portion of the language requirement. H. Diffloth and staff.

An intermediate level of reading comprehension and writing course for students who have acquired basic oral proficiency. Introduces some reading and writing with Chinese characters. If in doubt about eligibility, see instructor.

### KOREA 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. H. Diffloth.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

### KOREA 301-302 Advanced Korean

301, fall; 302, spring. 4 credits each term. Prerequisites: for Korean 301, Korean 202 or placement by instructor; for Korean 302, Korean 301 or placement by instructor. H. Diffloth and staff.

Reading of advanced texts, including newspapers and Chinese character material, together with advanced use of the spoken language.

### [KOREA 430 Structure of Korean (also Linguistics 430)]

Spring. 4 credits. Offered alternate years. Not offered 1998-99. J. Whitman. See description under Ling 430.]

## Latin

See listings under Classics.

## Nepali

See also courses listed in this section under South Asian Languages.

### Study Abroad in Nepal

Cornell and the central campus of the Nepalese national university—Tribhuvan—at Kirtipur, Kathmandu, co-sponsor an academic year in Nepal. North American students study and live with Nepalese students who come from outside the Kathmandu Valley to Tribhuvan University. Students may participate in one or two semesters. Courses are offered both at Tribhuvan University and at the Cornell-Nepal Study Program House adjacent to the university. All courses are officially taught in English. A five-week, in-country orientation program includes classes in intensive Nepali conversation, cultural orientation programs, and a ten-day field trip and trek. Semester course offerings include Nepali language (Tibetan and/or Newari languages also possible), contemporary issues in Nepalese studies, field research design and methods in sociology/anthropology and ecology/environment, and guided field research.

Juniors and seniors in good academic standing from any major field may participate. Students must have a desire to study on the other side of the world, to participate in a multicultural program, and to undertake rigorous field research. No experience in Nepal is necessary and instruction is in English, but some prior Nepali language study is strongly recommended. Students interested in the study abroad in Nepal program should consult with the Cornell Abroad office (474 Uris Hall) for further information.

**NEPAL 101-102 Elementary Nepali**

101, fall; 102, spring. 6 credits each term.  
Prerequisite: for Nepali 102, 101 or examination. S. Oja.

Intended for beginners. The emphasis is on basic grammar, speaking and comprehension skills, utilizing culturally appropriate materials and texts. Devanagari script for reading and writing is also introduced.

**NEPAL 160 Intensive Nepali**

Summer only. 10 credits. Intended for beginners. Offered alternate years. S. Oja. Emphasis will be on the spoken language, in dialogues, exercises, and conversation practice. In addition, however, special attention is given to assisting students to develop vocabularies and abilities appropriate to their unique professional needs. Reading and writing practice use both colloquial and scholarly materials in the Nepali (Devanagari) script.

**NEPAL 201-202 Intermediate Nepali Conversation @**

201, fall; 202, spring. 3 credits each term.  
Prerequisites: for Nepali 201, Nepali 102 or examination; for Nepali 202, Nepali 201 or examination. S. Oja.

Intermediate instruction in spoken grammar and verbal comprehension skills, with special attention to developing technical vocabularies and other verbal skills appropriate to students' professional fields.

**NEPAL 203-204 Intermediate Nepali Composition @**

203, fall; 204, spring. 3 credits each term.  
Prerequisites: for Nepali 203, Nepali 102 or examination; for Nepali 204, Nepali 203 or examination. S. Oja.

A systematic review of written grammar and reading comprehension, with special attention to the technical vocabularies, necessary writing skills, and published materials typical of advanced students' professional fields.

**NEPAL 300 Directed Studies**

Fall or spring. 1-4 credits variable.  
Prerequisite: permission of instructor. S. Oja.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**NEPAL 301-302 Advanced Nepali**

301, fall; 302, spring. 3 credits each term.  
Prerequisite: Nepali 204 or permission of instructor. S. Oja.

Reading of advanced texts, together with advanced drill on the spoken language.

**Pali**

See also courses listed in this section under South Asian Languages.

**PALI 131-132 Elementary Pali**

131, fall; 132, spring. 3 credits each term.  
This language series cannot be used to satisfy the language requirement. J. Gair.

131 is an introduction to the language of the canonical texts of Theravada Buddhism. Reading of authentic texts of Theravada Buddhism. Emphasis on both content and grammatical structure. Familiarity with Sanskrit is not required. 132 is a continuation of 131 with further readings.

**PALI 300 Directed Studies**

Fall or spring. 1-4 credits variable.  
Prerequisite: permission of instructor. J. Gair.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Polish****POLSH 131-132 Elementary Polish**

131, fall; 132, spring. 3 credits each term.  
Prerequisite: for Polish 132, Polish 131 or equivalent. This language series (131-132) is not sufficient to satisfy the language requirement. Offered alternate years. Staff.

Covers all language skills: speaking, listening comprehension, reading, and writing.

**[POLSH 133-134 Continuing Polish**

133, fall; 134, spring. 3 credits each term.  
Prerequisites: for Polish 133, Polish 132 or equivalent; for Polish 134, Polish 133 or equivalent. Satisfactory completion of Polish 134 fulfills the qualification portion of the language requirement. Offered alternate years. Not offered 1998-99.

An intermediate conversation and reading course.]

**POLSH 300 Directed Studies**

Fall or spring. 1-4 credits variable.  
Prerequisite: permission of instructor. W. Browne.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Portuguese**

See also courses listed in this section under Romance Languages.

**PORT 121-122 Elementary Portuguese**

121, fall; 122, spring. 4 credits each term.  
Intended for beginners. Students may attain qualification upon completion of 122 by achieving a satisfactory score on a special examination. J. Oliveira.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

**PORT 203-204 Intermediate Composition and Conversation @**

203, fall; 204, spring. 3 credits each term.  
Prerequisites: for Portuguese 203, Portuguese 122 or permission of instructor; for Portuguese 204, Portuguese 203 or permission of instructor. J. Oliveira.

Conversational grammar review with special attention to pronunciation and the development of accurate and idiomatic oral expression. Includes readings in contemporary Portuguese and Brazilian prose and writing practice.

**PORT 300 Directed Studies**

Fall or spring. 1-4 credits variable.  
Prerequisite: permission of instructor. J. Oliveira.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**PORT 303-304 Advanced Composition and Conversation @**

303, fall; 304, spring. 4 credits each term.  
Prerequisites: for Portuguese 303, Portuguese 204 or equivalent; for Portuguese 304, Portuguese 303 or equivalent. J. Oliveira.

**Quechua****QUECH 131-132 Elementary Quechua**

131, fall; 132, spring. 3 credits each term.  
Prerequisite: qualification in Spanish. This language series (131-132) cannot be used to satisfy the language requirement. L. Morat6-Peña.

A beginning conversation course in the Cuzco dialect of Quechua.

**QUECH 133-134 Continuing Quechua**

133, fall; 134, spring. 3 credits each term.  
Prerequisites: for Quechua 133, Quechua 131-132 or equivalent; for Quechua 134, Quechua 133 or equivalent. Satisfactory completion of Quechua 134 fulfills the qualification portion of the language requirement. L. Morat6-Peña.

An intermediate conversation and reading course. Study of the Huarochiri manuscript.

**[QUECH 135-136 Quechua Writing Lab**

135, fall; 136, spring. 1 credit each term.  
Prerequisite: concurrent enrollment in Quechua 131-132 or instructor's approval. Letter grade only. Not offered 1998-99. L. Morat6-Peña.

Computer-assisted drill and writing instruction in elementary Quechua.]

**QUECH 300 Directed Studies**

Fall or spring. 1-4 credits variable.  
Prerequisite: permission of instructor. L. Morat6-Peña.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Romance Languages****LANG 321-322 History of the Romance Languages (also Linguistics 321-322) #**

321, fall; 322, spring. 4 credits each term.  
Prerequisites: Linguistics 101 or equivalent and qualification in any Romance language. Offered alternate years. C. Rosen.

321: Popular Latin. Pan-Romance trends in phonology, morphology, syntax, and the lexicon. Regional divergence. Non-Latin influences. Medieval diglossia and emergence of Romance standards. 322: French, Italian, and Spanish from 850 to 1250 A.D. Analysis of texts. Overview of other languages to the present day. Elements of dialectology.

**[LANG 323-324 Comparative Grammar of the Romance Languages (also Linguistics 323-324)]**

323, fall; 324, spring. 4 credits each term.  
Prerequisites: Linguistics 101, 110, or equivalent and qualification in any Romance language. Offered alternate years. Not offered 1998-99. C. Rosen.

Concise survey of Romance syntax, covering the salient constructions in six languages with equal attention to their historical evolution and their current state. Grammatical innovation and divergence in a typological perspective.]

## Russian

For literature courses and information about study abroad, see Russian Literature.

### The Russian Major

See Russian Literature.

### Russian Studies Major

See "Special Programs and Interdisciplinary Studies," which follows the department listings.

### RUSSA 103-104 Conversation Practice

103, fall; 104, spring. 2 credits each term. Must enroll in one section of 103 and one section of 121, in the fall; and one section of 104 and one section of 122 in the spring. L. Paperno.

### RUSSA 121-122 Elementary Russian

121, fall or summer; 122, spring or summer. 4 credits each term. May be taken alone and qualification will be achieved with satisfactory completion of 121-122-123; or may be taken concurrently with 103-104 and qualification will be achieved at completion of 122-104. S. Paperno, V. Tsimberov and staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing. Course materials include clips from original Russian films and TV programs.

### RUSSA 123 Continuing Russian

Fall. 4 credits. Limited to students who have previously studied Russian or been placed by department. Satisfactory completion of Russian 123 fulfills the qualification portion of the language requirements. V. Tsimberov, S. Paperno, L. Paperno.

A course designed to prepare students for study at the 200 level. Passing this course is equivalent to qualification. Authentic Russian materials are used: TV, books, etc.

### RUSSL 201-202 Readings in Russian Literature

For description see Russian Literature.

### RUSSA 203-204 Intermediate Composition and Conversation

203, fall, or summer; 204, spring or summer. 3 credits each term. Prerequisites: for Russian 203, qualification in Russian (Russian 123 or placement by department); for Russian 204, Russian 203 or equivalent. L. Paperno, S. Paperno, V. Tsimberov.

Guided conversation, composition, reading, pronunciation, and grammar review, emphasizing the development of accurate and idiomatic expression in the language. Course materials include video clips from an original Russian feature film.

### RUSSA 205-206 Reading Russian Press

205, fall; 206, spring. 2 credits each term. Prerequisite: qualification in Russian (Russian 123 or placement by department). Both semesters must be taken in order to satisfy the proficiency level for the language requirement. This course cannot be used to satisfy the humanities requirement. Staff.

Reading unabridged articles on a variety of topics from current Russian periodicals.

*Note: Students placed in the 200-level courses also have the option of taking courses in introductory literature; see separate listings*

*under Russian 201 and 202 for descriptions of these courses, any of which may be taken concurrently with the 203-204 and 205-206 language courses described above. The introductory literature courses are offered by the Department of Russian Literature, and the 203-204 and 205-206 language courses by the Department of Modern Languages.*

### RUSSA 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

### RUSSA 303-304 Advanced Composition and Conversation

303, fall; 304, spring. 4 credits each term. Prerequisites: for Russian 303, Russian 204 or equivalent; for Russian 304, Russian 303 or equivalent. L. Paperno, S. Paperno, V. Tsimberov.

Writing, reading, and conversation: viewing and reading authentic language materials; current Russian films (feature and documentary), newspapers, TV programs, and other materials are used.

### RUSSA 305-306 Directed Individual Study

305, fall; 306, spring. 2 credits each term. Prerequisite: placement by the department. Staff.

This course is intended for students with special needs (e.g., children of Russian immigrants who speak Russian at home) that cannot be met by any other Russian course.

### RUSSA 309-310 Advanced Reading

309, fall; 310, spring. 4 credits each term. Prerequisites: for Russian 309, Russian 204; for Russian 310, Russian 309 or equivalent. L. Paperno.

The purpose of the course is to teach advanced reading skills. The weekly reading assignment is 20-40 pages of unabridged Russian prose, mostly (non-fiction) of the 20th century. The discussion of the reading is conducted entirely in Russian and is centered around the content of the assigned selection.

### RUSSA 401-402 History of the Russian Language (also Linguistics 417-418) #

401, spring; [402.] 4 credits each term. Prerequisites: for Russian 401, permission of instructor; for Russian 402, Russian 401 or equivalent. Offered alternate years. W. Browne.

Phonological, morphological, and syntactic developments from Old Russian to modern Russian.

### [RUSSA 403-404 Linguistic Structure of Russian (also Linguistics 443-444)]

403, fall; 404, spring. 4 credits each term. Prerequisites: for Russian 403, Linguistics 101 and permission of instructor, for Russian 404, Russian 403 or equivalent. Offered alternate years. Not offered 1998-99. W. Browne.

A synchronic analysis of the structure of modern Russian. Russian 403 deals primarily with morphology and its relation to syntax and 404 with syntax and word order. Topics covered include case theory, the functions of word order, voice, agreement, impersonal constructions, negation, nonuniversal categories, and the relation between morphology and syntax.]

### RUSSL 409 Russian Stylistics

For description, see Russian Literature.

### RUSSA 413-414 Advanced Conversation and Stylistics

413, fall; 414, spring. 2 credits each term.

Prerequisites: for Russian 413, Russian 303-304 or the equivalent, for Russian 414, Russian 413 or equivalent. V. Tsimberov.

Discussion of authentic unabridged Russian texts and films (feature or documentary) in a variety of nonliterary styles and genres.

### RUSSL 491 Reading Course: Russian

For description see Russian Literature.

### RUSSL 492 Supervised Reading in Russian Literature

For description see Russian Literature.

### RUSSL 499 The Avant-Garde in Russian Literature and the Arts

For description see Russian Literature.

### [RUSSA 601 Old Church Slavic

Fall. 4 credits. This course is prerequisite to Russian 602. Offered alternate years.

Not offered 1998-99. W. Browne. Grammar and reading of basic texts.]

### [RUSSA 602 Old Russian Texts

Spring. 4 credits. Prerequisite: Russian 601. Offered alternate years. Not offered 1998-99. W. Browne.

Grammatical analysis and close reading of Old Russian texts.]

### RUSSA 633-634 Russian for Russian Specialists

633, fall; 634, spring. 2 credits each term. Prerequisite: four years of college Russian. For graduate and advanced undergraduate students. S. Paperno.

The course is designed for students who specialize in an area of Russian studies requiring fine active control of the language. Fine points of syntax, usage, and style are discussed.

### [RUSSA 651-652 Comparative Slavic Linguistics (also Linguistics 671-672)]

651, fall; 652, spring. 4 credits each term. Prerequisites: for Russian 651, Russian 601 taken previously or simultaneously or permission of instructor, for Russian 652, Russian 651 or permission of instructor. Offered alternate years. Not offered 1998-99. W. Browne.

Sounds and forms of the Slavic languages and of prehistoric common Slavic; main historical developments leading to the modern languages.]

### [RUSSA 700 Seminar in Slavic Linguistics

Offered according to demand. Variable credit. Not offered 1998-99. Staff.

Topics chosen according to the interests of staff and students.]

## Sanskrit

See listings under Asian Studies and Linguistics: Indo-European. See also courses listed in this section under South Asian Languages.



## Serbo-Croatian

### [SEBCR 131-132 Elementary Serbo-Croatian

131, fall; 132, spring. 3 credits each term. Prerequisite for Serbo-Croatian 132: Serbo-Croatian 131 or equivalent. This language series (131-132) is not sufficient to satisfy the language requirement. Offered alternate years. Not offered 1998-99. W. Browne.

Covers all language skills: speaking, listening comprehension, reading, and writing.]

### SEBCR 133-134 Continuing Serbo-Croatian

133, fall; 134, spring. 3 credits each term. Prerequisites: for Serbo-Croatian 133, Serbo-Croatian 132 or equivalent; for Serbo-Croatian 134, Serbo-Croatian 133 or equivalent. Satisfactory completion of Serbo-Croatian 134 fulfills the qualification portion of the language requirement. Offered alternate years. W. Browne.

An intermediate conversation and reading course.

### SEBCR 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Sinhala (Sinhalese)

See also courses listed in this section under South Asian Languages.

### SINHA 101-102 Elementary Sinhala

101, fall; 102, spring. 6 credits each term. Prerequisite: for Sinhala 102, Sinhala 101 or equivalent. Staff.

A semi-intensive course for beginners. A thorough grounding is given in all the language skills; listening, speaking, reading, and writing.

### SINHA 160 Intensive Sinhala

Summer only. 10 credits. Intended for beginners. Offered alternate years. Emphasis is on the spoken (colloquial) language, the writing system is introduced and used to present all Sinhala materials, with additional reading practice with colloquial materials. A foundation is laid for later study of the written language (literary Sinhala).

### SINHA 201-202 Intermediate Sinhala Reading @

201, fall; 202, spring. 3 credits each term. Prerequisites: for Sinhala 201, Sinhala 102; for Sinhala 202, Sinhala 201 or equivalent. Staff.

### SINHA 203-204 Intermediate Composition and Conversation @

203, fall; 204, spring. 3 credits each term. Prerequisites: for Sinhala 203, Sinhala 102 or permission of instructor; for Sinhala 204, Sinhala 203 or equivalent. Staff.

### SINHA 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## South Asian Languages

### [LANG 341 India as a Linguistic Area (also Linguistics 341)

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. W. Gair.

A basic introduction to the linguistic and sociolinguistic character of the subcontinent, with special attention to cross-linguistic family influences and convergence.]

### [LANG 440 Dravidian Structures (also Linguistics 440)

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. W. Gair.

A comparative and contrastive analysis of the structures of several Dravidian languages.]

### [LANG 442 Indo-Aryan Structures (also Linguistics 442)

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. J. W. Gair.

Typological discussion of the languages of the subfamily. Specific topics and emphasis may vary depending on the interest of the student.]

## Southeast Asian Languages

### [LANG 230 Introduction to Southeast Asian Languages and Linguistics (also Linguistics 230) @

Fall. 3-4 credits variable. For non-majors or majors. Not offered 1998-99. A. Cohn, J. Wolff.

This is a survey of the languages of Southeast Asia. The goal of this course is to expose students to Southeast Asia as a linguistic area and introduce them to the rich language diversity of the region. It includes three main parts: 1) sociolinguistic and ethnolinguistic issues of language and politics, language and culture, and language use; 2) language structures and typological patterns of the area's languages; 3) historical linguistics, as well as the linguistic effects of language contact and linguistic evidence for prehistory.]

### [LANG 653-654 Seminar in Southeast Asian Linguistics (also Linguistics 653-654)

653, fall; 654, spring. 4 credits each term. Prerequisite: permission of instructor. Language 653 isn't a prerequisite for Language 654. Not offered 1998-99. Staff.

Languages of mainland Southeast Asia. Topics, chosen according to student interests, may include description, dialectology, typology, comparative reconstruction, and historical studies.]

### [LANG 655-656 Seminar in Austronesian Linguistics (also Linguistics 655-656)

655, fall; 656, spring. 4 credits each term. Prerequisites: for 655, permission of instructor, for 656, Language 655. Not offered 1998-99. J. Wolff.

Descriptive and comparative studies of Malayo-Polynesian languages.]

### [LANG 657-658 Seminar in Austroasiatic Linguistics (also Linguistics 657-658)

657, fall; 658, spring. 4 credits each term. Prerequisite: permission of instructor. Not offered 1998-99. Staff.

Descriptive and comparative studies of Austroasiatic languages.]

## Spanish

See also courses listed in this section under Romance Languages.

For advanced Spanish language and literature courses and information on study abroad, see Romance Studies.

## The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill in the linguistic analysis of Spanish. (For the major in Spanish literature see the description under Romance Studies.) Satisfactory completion of the major should enable students to meet language requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, or to satisfy standards for acceptance into the training programs of the government, social agencies, and business concerns. A Spanish major combined with another discipline may also allow a student to undertake pre-professional training for graduate study in law, medicine, business, etc. Students interested in a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies for Spanish linguistics, Professor Margarita Suñer.

## The Core

All majors will work out a plan of study in consultation with their advisers. Previous training and interests as well as vocational goals are taken into account when the student's program of courses is determined. Spanish 201 and 204 or 212 (or equivalent) are prerequisite to entering the major in Spanish. All majors normally include the following core courses in their programs:

- 1) Spanish 315-316-318
- 2) Spanish 311 and 312 (or equivalent)

Spanish majors have great flexibility in devising their programs of study and areas of concentration.

## The Linguistic Option

Spanish linguistics, for which the program normally includes at least 20 credits, and at least 8 additional credits in general or Spanish linguistics (such as Spanish 366, 405, 407, 408, and others). (Linguistics 101 is recommended before entering this program.) The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.

**Honors.** Honors in Spanish may be achieved by superior students who want to undertake guided independent reading and research in an area of their choice. Students in the senior year select a member of the Spanish faculty engaged in Spanish literature or linguistics to supervise their work and direct the writing of their honors essays.

## Important information about registration for Spanish classes

The Spanish Program offers a number of elementary and intermediate courses to satisfy the needs of students with a variety of backgrounds; students are urged to register for the appropriate level so as to start the semester in the right class. Students with two

or more years in the language are required to take the placement test before taking any Spanish course.

| Background                | Course   |
|---------------------------|--|
| 0 Spanish                 | Spanish 121  |
| less than 2 years         | Spanish 121  |
| 2 years or more           | Placement test score required for any Spanish course |
| Language Placement Score* |  |
| less than 37              | Spanish 121  |
| or SAT II below 370       |  |
| 37-44                     | Spanish 112, 122                                     |
| or SAT II 370-450         |  |
| 45-55                     | Spanish 123  |
| SAT II 460-580            |  |
| 56 or more                | Spanish 200, 203, 213                                |
| or SAT II 590 and above   |  |

\*the placement score can be from an SAT II test, the CPT, or the LPS.

#### **[SPAND 101 Basic Course I]**

Summer only. 6 credits. Prerequisite: no Spanish. Not offered 1998-99. This course is intended for students with absolutely no experience in Spanish. (Spanish 123 and 203 are usually offered in the summer concurrently with 101 for students with prior experience.) Spanish 101 provides a thorough grounding in all language skills. Language practice in small groups. Lectures cover grammar, reading, and cultural information.]

#### **SPAND 112 Elementary Spanish: Review and Continuation**

Fall. 4 credits. Prerequisite: LPS score 37-44. M. Rice. This course is designed for students who have taken some Spanish and who have a placement score of 37-44 or SAT II 370-450. It provides a basic review and then moves on to cover new material for the remainder of the term. Students who have taken Spanish 121 may enroll for this course. As part of the final exam, students take the LPS and, according to their score, may place into Spanish 123 (score below 56) or receive qualification (56 or above), and placement into the 200-level courses.

#### **SPAND 121-122 Elementary Spanish**

121, fall; 122, spring. 4 credits each term. Prerequisite: for Spanish 122, Spanish 121. N. Maldonado-Méndez and staff.

This course is intended for students with no experience in Spanish. (Students who have previously studied 2 or more years of Spanish are not eligible for 121 unless they have an LPS score lower than 37 or SAT II lower than 370.) The course provides a thorough grounding in all language skills. Language practice in small groups. Lectures cover grammar, reading, and cultural information. Evening prelims.

#### **SPAND 123 Continuing Spanish**

Fall, spring, or summer. 4 credits. Prerequisite: Spanish 112, Spanish 122, or an LPS score 45-55 or SAT II 460-580. M. K. Redmond and staff.

An all-skills course which requires daily preparation before class and active student participation in class. Includes researching cultural topics of the student's choice, oral presentations, grammar review, audio tapes, video, journal and essay writing, speaking in small groups and authentic readings.

Satisfactory completion of Spanish 123 fulfills the qualification portion of the language requirement. After this course, the student may take 201, 203, 213.

#### **SPAND 200 Spanish for English/Spanish Bilinguals (also Latino Studies Program 202)**

Fall or spring. 3 credits. Prerequisite: LPS score 56 or higher, SAT II 590 or higher, CASE placement, or permission of instructor. D. Cruz de Jesús.

A course designed to expand bilingual students' knowledge of Spanish by providing them with ample opportunities to develop and improve each of the basic language skills. Not available to students who have taken Spanish 203 or 213.

#### **SPAND 203 Intermediate Composition and Conversation I**

Fall, spring, or summer. 3 credits. Prerequisite: Spanish 123, LPS score 56-64, or SAT II 590-680. Not available to students who have taken Spanish 213. M. Rice, J. Routier-Pucci and staff.

Conversational grammar review with special attention to the development of accurate and idiomatic oral expression. Includes readings in contemporary Spanish prose and practice in writing.

#### **SPAND 204 Intermediate Composition and Conversation II**

Fall or spring. 3 credits. Prerequisite: Spanish 203, 213, CASE placement, or permission of instructor. This course, or its equivalent, is required for admission to the Cornell Abroad program. D. Cruz de Jesús and staff.

An advanced-intermediate course designed for students who want to go beyond the basic language requirement, and further broaden their knowledge of the language and related cultures, as well as improve their comprehension and communication skills. This course guides students to take greater command of their own language learning process to optimize their continued progress. Includes a strategic focus on specific problems in listening and reading comprehension, and in accurate writing and speaking.

#### **SPAND 205 Spanish Translation**

Summer. 4 credits. Prerequisite: proficiency in Spanish. J. Routier-Pucci. The objective of the course is to learn to translate from Spanish into English and in so doing, to investigate the various technical, stylistic and cultural difficulties encountered in the translation process.

#### **SPAND 213 Intermediate Spanish for the Medical and Health Professions**

Fall or spring. 3 credits. Prerequisite: qualification in Spanish (Spanish 123, LPS score 56-64, or SAT II 590-680) or permission of instructor. Students who have taken Spanish 203 or 200 should speak to the instructor. A. Tió.

Conversational grammar review, with dialogues, debates, compositions, and readings on health-related themes. Special attention is given to relevant cultural differences. Fulfills proficiency requirement.

#### **SPAND 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

#### **[SPAND 310 Advanced Conversation and Pronunciation]**

Spring. 3 credits. Prerequisite: Spanish 204 or equivalent. Not offered 1998-99. Z. Iguina.

A conversation course with intensive oral practice obtained through the production of video programs. Study of the fundamental aspects of communication in the standard spoken and written Spanish, with some focus on dialectal variations. Weekly pronunciation labs.]

#### **SPAND 366 Spanish in the United States (also Latino Studies Program 366, Linguistics 366 and SPANR 366)**

Spring. 4 credits. Prerequisite: some knowledge of Spanish. M. Suñer. Examination of major Spanish dialects in the United States from a linguistic perspective. Contrast with the standard language. Borrowing, interference, and code switching. Syntactic, morphological, and phonological characteristics. Sex-related phenomena.

#### **[SPAND 407 Grammatical Structure of Spanish I (also Linguistics 407 and SPANR 407)]**

Spring. 4 credits. Prerequisite: proficiency in Spanish or permission of instructor. Not offered 1998-99. M. Suñer.]

#### **[SPAND 408 Grammatical Structure of Spanish II (also Linguistics 408 and SPANR 408)]**

Spring. 4 credits. Prerequisites: Linguistics 101 and proficiency in Spanish or permission of instructor. Offered alternate years. Not offered 1998-99. M. Suñer.]

#### **SPAND 630 Spanish for Reading**

Spring. 3 credits. Limited to graduate students. J. Routier-Pucci. Designed for those with little or no background in Spanish and little exposure to written Spanish, this course primarily aims to develop skill in reading Spanish. Grammar basics, extensive vocabulary, and strategies for reading in a foreign language are covered. The types of texts to be covered will be based on the interests of the students in the course.

#### **SPAND 660 Latino Languages, Ideology and Practice (also Anthropology 660 and Latino Studies Program 660)**

Spring. 4 credits. V. Santiago-Irizarry. For description, see Anthropology.

### **Swahili**

See listings under Africana Studies and Research Center.

### **Swedish**

#### **SWED 121-122 Elementary Swedish**

121, fall; 122, spring. 4 credits each term. Prerequisite: for Swedish 122, Swedish 121 or equivalent. L. Trancik.

The aim of this course is to develop skills in listening, speaking, reading and writing within Sweden's cultural context. Interactive computer programs are used in these courses.

#### **SWED 123 Continuing Swedish**

Fall. 4 credits. Prerequisite: Swedish 122 or equivalent. L. Trancik. Development of skills in spoken and written Swedish within Sweden's cultural context.

**SWED 203 Intermediate Swedish**

Spring. 3 credits. Prerequisite: Swedish 123 or permission of instructor. L. Trancik. Intermediate to advanced level instruction utilizing audio-visual material and text to enhance language comprehension.

**SWED 204 Advanced Swedish**

Fall. 3 credits. Prerequisite: Swedish 203 or permission of instructor. Taught in Swedish. L. Trancik.

Emphasis on improving oral and written expression of Swedish, including vocabulary, readings in contemporary prose, treatment of specific problems in grammar, and presentation of videos and films.

**SWED 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. L. Trancik.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Tagalog**

See also courses listed in this section under Southeast Asian Languages.

**TAG 121-122 Elementary Tagalog**

121, fall; 122, spring. 4 credits each term. Prerequisite: for Tagalog 122, Tagalog 121. Staff.

A thorough grounding is given in basic speaking and listening skills with an introduction to reading.

**[TAG 123 Continuing Tagalog**

Fall. 4 credits. Prerequisite: Tagalog 122 or equivalent. Satisfactory completion of Tagalog 123 fulfills the qualification portion of the language requirement. Not offered 1998-99. J. Wolff and staff.

Improves speaking skills, such as fluency and pronunciation, focusing on verbal communication skills; offers a wide range of readings; and sharpens listening skills.]

**TAG 205-206 Intermediate Tagalog @**

205, fall; 206, spring. 3 credits each term. Prerequisites: for Tagalog 205, Tagalog 123 or equivalent; for Tagalog 206, Tagalog 205 or equivalent. Satisfactory completion of Tagalog 205 fulfills the proficiency portion of the language requirement. Staff.

This course develops all four skills: reading, writing, speaking, and comprehension.

**TAG 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Thai**

See also courses listed in this section under Southeast Asian Languages.

**THAI 101-102 Elementary Thai**

101, fall; 102, spring. 6 credits each term. Prerequisite: for Thai 102, Thai 101 or equivalent. Intended for beginners or students placed by examination. N. Jagacinski.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

**THAI 201-202 Intermediate Thai Reading**

201, fall; 202, spring. 3 credits each term. Prerequisites: for Thai 201, Thai 102; for Thai 202, Thai 201 or equivalent. N. Jagacinski.

**THAI 203-204 Intermediate Composition and Conversation @**

203, fall; 204, spring. 3 credits each term. Prerequisites: for Thai 203, Thai 102; for Thai 204, Thai 203. N. Jagacinski.

**THAI 301-302 Advanced Thai @**

301, fall; 302, spring. 4 credits each term. Prerequisite: Thai 202 or equivalent. N. Jagacinski.

Selected readings in Thai writings in various fields.

**THAI 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. N. Jagacinski.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**THAI 303-304 Thai Literature**

303, fall; 304, spring. 4 credits each term. Prerequisite: Thai 302 or equivalent. N. Jagacinski.

Reading of significant novels, short stories, and poetry written since 1850.

**THAI 401-402 Directed Individual Study**

401, fall; 402, spring. 4 credits each term. For advanced students or students with special problems or interests. Prerequisite: permission of instructor. N. Jagacinski.

**Ukrainian****UKRAN 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. Staff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**Urdu**

See listings under Hindi.

**Vietnamese**

See also courses listed in this section under Southeast Asian Languages.

**VIET 101-102 Elementary Vietnamese**

101, fall; 102, spring. 6 credits each term. Prerequisite: for Vietnamese 102, Vietnamese 101 or equivalent. Intended for beginners or students placed by examination. Satisfactory completion of Vietnamese 102 fulfills the qualification portion of the language requirement. T. Tranviet.

A thorough grounding is given in all language skills: listening, speaking, reading, and writing.

**VIET 201-202 Intermediate Vietnamese**

201, fall; 202, spring. 3 credits each term. Prerequisites: for Vietnamese 201, Vietnamese 102 or equivalent; for Vietnamese 202, Vietnamese 201. T. Tranviet.

Continuing instruction in spoken and written Vietnamese.

**VIET 203-204 Intermediate Vietnamese Composition and Reading @**

203, fall; 204, spring. 3 credits each term. Prerequisite: permission of instructor only. T. Tranviet.

Designed for students and "native" speakers of Vietnamese whose speaking and listening are at the advanced level, but who still need to improve writing and reading skills.

**VTLIT 222-223 Introduction to Classical Vietnamese**

For description see Asian Studies.

**VIET 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. T. Tranviet.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**VIET 301-302 Advanced Vietnamese @**

301, fall or spring; 302, fall or spring. 3 credits each term. Prerequisites: for Vietnamese 301, Vietnamese 202 or permission of instructor; for Vietnamese 302, Vietnamese 301. T. Tranviet.

Continuing instruction in spoken and written Vietnamese; emphasis on enlarging vocabulary, increasing reading speed, and reading various genres and styles of prose.

**VIET 401-402 Directed Individual Study**

401, fall; 402, spring. 2-4 credits variable each term. Prerequisite: permission of instructor. Intended for advanced students. T. Tranviet.

Various topics according to need.

**Welsh****[WELSH 411 Readings in Modern Welsh (also Linguistics 238)**

Fall. 3 credits. Prerequisite: permission of instructor. Not offered 1998-99. W. Harbert.

Topics are selected on the basis of student needs.]

**WELSH 300 Directed Studies**

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. W. Harbert.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

**MODERN LANGUAGES AND LINGUISTICS**

Professors Emeriti of Modern Languages and Linguistics: J. Grimes, C. Hockett, R. Jones, E. Jorden, H. Kufner, R. Leed, W. McCoy, G. Messing, D. Solá, F. van Coetsem

**MUSIC**

M. Scatterday, chair; S. Tucker, director of undergraduate studies (218 Lincoln Hall, 255-3423); R. Harris-Warrick, director of graduate studies (312 Lincoln Hall, 255-7141); M. Bilson, X. Bjerken, D. Borden, D. Conn, L. Coral, T. Folan, M. Hatch, K. Hester, J. Hsu, J. Kellock, E. Murray, J. Peraino, D. Randel, A. Richards, R. Riley, D. Rosen, R. Sierra, S. Stucky, J. Webster, D. Yearsley, N. Zaslaw

Emeritus: W. Austin, K. Husa, S. Monosoff, R. Palmer, T. Sokol, M. Stith.

Department office: 255-4097.

### Musical Performance and Concerts

Musical performance is an integral part of Cornell's cultural life and an essential part of its undergraduate academic programs in music. The department encourages music making through its offerings in individual instruction and through musical organizations and ensembles that are directed and trained by members of the faculty. Students from all colleges and departments of the university join with music majors in all of these ensembles:

#### Vocal ensembles

Cornell Chamber Singers  
Cornell Chorale  
Cornell University Chorus  
Cornell University Glee Club  
Sage Chapel Choir

#### Instrumental ensembles

Chamber Music Ensembles  
Cornell Chamber Orchestra  
Cornell Experimental Lab Ensemble  
Cornell Gamelan  
Cornell Jazz Ensembles  
Cornell Symphony Orchestra  
Cornell University Chamber Winds  
Cornell University Symphonic Band  
Cornell University Wind Ensemble  
Cornell University Wind Symphony

Information about requirements, rehearsal hours, and conditions for academic credit can be found in the following listings for the Department of Music. Announcements of auditions are posted during registration each fall term and, where appropriate, each spring term as well.

The university is also home to many student-run musical organizations, including the Big Red Marching Band and Big Red Pep Band, the Cornell Savoyards, and several a cappella groups. Information about these groups, too, is available through the Department of Music office, 104 Lincoln Hall (255-4097).

The Department of Music and the Faculty Committee on Music sponsor more than one hundred formal and informal concerts each year by Cornell's ensembles, faculty, and students and by distinguished visiting artists. The great majority of concerts are free and open to the public. Lectures and concerts are listed on the World Wide Web (<http://www.arts.cornell.edu/music/>). More information is available through the events office (255-4760).

### Nonmajors

In addition to its performing, instructional, and concert activities, the department offers numerous courses for nonmajors, many of which carry no prerequisites and presuppose no previous formal training in music. Consult the following course listings, and for further information apply to the department office, 104 Lincoln Hall (255-4097), or to the director of undergraduate studies.

### The Major

Two options are available to the student planning to major in music. Each carries the study of music to an advanced level through the integration of performance, music theory, and music history. Option I is a general course, not necessarily oriented toward

eventual graduate or professional work in music. Option II is a more specialized and concentrated program, suitable for students who want to prepare for graduate or professional work in music.

All students contemplating a major in music under either option should arrange for placement examinations and advising in the department as early as possible, usually during the freshman orientation period. Information is available from the director of undergraduate studies. All students are expected to have chosen an adviser from among the department faculty at the time of application for major status.

**Option I** presupposes some musical background before entering Cornell. Prerequisites for admission to the major are completion of Music 152 and 154, at the latest by the end of the sophomore year (the freshman year is preferable), with an overall grade of B- or better in each course. For further information, apply to the director of undergraduate studies.

The requirements for the Bachelor of Arts degree with a major in music under Option I comprise the following:

- 1) in music theory: Music 251, 252, 253, 254, 351, 353, and one of the following: Music 451, 452, 453, 454, 455, 456.
- 2) in music history: sixteen credits in courses numbered 381 or above listed under Music History Courses for Majors. At least three of these courses must be drawn from the four-course sequence Music 381-384.
- 3) in performance: four semesters of participation in a musical organization or ensemble sponsored by the Department of Music (Music 331 through 346 and 421 through 448).

**Option II** presupposes considerable musical study before entering Cornell. Prerequisites for admission into the Option II program are previous acceptance as an Option I major and satisfactory completion of Music 252 and 254, normally by the end of the sophomore year. Students must apply to the department for formal acceptance as an Option II major. An Option II major concentrates in one of the three areas listed below. For Option II in performance, exceptional promise must be demonstrated, in part by a successful solo recital before the end of the sophomore year.

The requirements for the Bachelor of Arts degree with a major in music under Option II are:

- 1) completion of all the requirements for Option I, except as noted below, and
- 2) in addition:
  - a) in performance:
    - (1) the requirement for four semesters of participation in a musical organization or ensemble is waived (but such majors are expected to participate actively in chamber and other ensembles sponsored by the department);
    - (2) sixteen credits in individual instruction in the student's major instrument, or voice, earned by taking Music 323-324 throughout the junior and senior years.

- b) in theory and composition or in history: twelve additional credits in this area of concentration at the 300 level or above, of which either four may be earned in Music 301 or 302 when taken once for four credits, or eight may be earned in Music 401-402.

**Honors.** The honors program in music is intended to provide special distinction for the department's ablest undergraduate majors. Qualified students are invited to become candidates by the faculty early in the second semester of their junior year. As soon as possible thereafter, the student forms a committee of three or more faculty members to guide and evaluate the honors work. In the senior year the candidate enrolls in Music 401-402 with the chair of the honors committee as instructor. Candidates will be encouraged to formulate programs that allow them to demonstrate their musical and scholarly abilities, culminating in an honors thesis, composition, or recital, to be presented not later than April 1 of the senior year. A comprehensive examination administered by the candidate's committee is held not later than May 1. The level of honors conferred is based primarily on the candidate's performance in the honors program, and secondarily on the candidate's overall record in departmental courses and activities.

### Distribution Requirement

College of Arts and Sciences students may apply either one or two Music Department courses toward the distribution requirement in Group 4 (humanities and the arts). Neither freshman seminars nor advanced placement credit count toward this requirement.

If one music course is counted for distribution, it must carry at least 3 credits, and it may not be in musical performance (Music 321-322, 323-324) or in organizations and ensembles (Music 331 through 346 and 421 through 448).

If two music courses are counted for distribution, they must total at least 6 credits, and at least one of the courses must be academic, not performance-oriented. The second "course," however, may comprise **either** up to 4 credits earned in performance (Music 321-322, 323-324) **or** up to 4 credits earned in organizations and ensembles (Music 331 through 346 and 421 through 448), but not both.

### Facilities

**Music Library.** The Music Library, in Lincoln Hall, has an excellent collection of standard research tools. Its holdings consist of approximately one hundred-thousand books, periodicals, and scores and forty-five thousand sound and video recordings. Particularly noteworthy are the collections of opera from all periods; twentieth-century scores and recordings; a large microfilm collection of Renaissance sources, both theoretical and musical; and a collection of eighteenth-century chamber music. In addition, the Department of Rare Books, in the Kroch Library, houses a collection of early printed books on music and musical manuscripts.

**Concert Halls.** The Department of Music sponsors more than one hundred concerts annually. Cornell's principal concert halls are Bailey Hall Auditorium (about 2,000), Alice Statler Auditorium (about 900), Sage Chapel



(about 800) and Barnes Hall Auditorium (about 280).

**Rehearsal Spaces.** The orchestras and bands rehearse in Bailey Hall, Barnes Hall, and Barton Hall; the Jazz Ensembles, Gamelan, and Chamber Ensembles rehearse in Lincoln Hall; and the choral ensembles are quartered in Sage Chapel. Eleven practice studios in Lincoln Hall are available for individual practice by pianists, vocalists, and instrumentalists.

Twenty-two grand pianos and eight upright or studio pianos are housed in Cornell's offices, classrooms, and rehearsal spaces. In addition, our Center for Keyboard Studies includes two concert grand pianos (Steinway and Mason & Hamlin), two eighteenth-century fortepiano replicas (copies of Johann Andreas Stein and Anton Walter), an original Broadwood grand piano from 1827, an 1824 Conrad Graf fortepiano replica, one Dowd and one Hubbard harpsichord, and a Challis clavichord. Barnes Hall houses a chamber organ by Derwood Crocker, a large Aeolian Skinner Organ is located in Sage Chapel, and there is a Helmuth Wolff tracker organ in Anabel Taylor Chapel.

**Digital/Electronic Equipment.** A Macintosh Master studio is available for graduate student use (hours to be arranged) and occasional independent study use. The software used is Performer, Mosaic, Finale, and several Opcode patch editor/librarians. The instruments include a Yamaha KX88 MIDI Controller keyboard, a Yamaha TX802 FM synthesizer, an E-Mu Proteus XR, a Casio FZ 10M sampler and various other synthesizers. In addition, there are two MIDI work stations with additional instruments, including a Korg M1 synthesizer and an Akai S900 sampler.

## Freshman Seminars

### MUSIC 111 Sound, Sense, and Ideas

Section I—Words and Music. Spring.

3 credits. R. Harris-Warrick.

In speaking, writing and even thinking about music, we rely on language to express the structure and meaning of a complex nonverbal art. This seminar will explore relationships between words and music. We will look at works of many periods and styles by Dowland, Handel, Mozart, Gershwin, the Beatles, and others. The readings will offer a wide context for thinking and writing about music.

Section II—Unsworth's Fiddler, or The Musician's Misery. Fall and spring.  
3 credits. G. Mouldsdales.

The musician in Barry Unsworth's novel *Sacred Hunger* is an Irish fiddler named Sullivan. He works on a slave ship, playing reels and jigs to "exercise" the slaves. Sullivan is happy to play, but he doesn't like his working conditions: the sounds of the slaves' chains clanging on the deck spoils his music.

From the myth of Orpheus to the career of "Shine" pianist David Helfgott, the figure of the suffering musician is a common one. In this seminar, we will consider the association of music and unhappiness in a variety of guises: as a literary trope informing singer and composer biographies; as a principle behind musical repertoires and occasions; and, as a means of marking a character—even non-musicians—in film and literature. Musics studied may include jazz, "hurtin' songs," and

the late Renaissance lament, while texts and films may include fiction by Wagner, *Shine*, *The Seventh Veil*, and Farinelli.

Section III—Classical Music: Famous First Performances. Fall and spring. 3 credits.  
S. Day.

Several works in the classical concert-hall and operatic repertory had notorious circumstances surrounding their premiere performance. In this seminar we will become familiar with the historical background of a given work's inception, and consider the obstacles implicated in the act of "reconstructing" original context. Assignments will help us develop astute listening and clear writing. Repertoire may include Handel's *Water Music*, Haydn's *Farewell Symphony*, Beethoven's *Symphony No. 9*, Berlioz's *Symphonie fantastique*, Bizet's *Carmen*, Dvorák's *New World Symphony*, Ravel's *Bolero*, and Stravinsky's *Rite of Spring*; we will also interview a contemporary composer and attend the premiere performance of one of his/her works.

### [MUSIC 115 Popular Musics Today

Fall. 3 credits. Not offered 1998–99.]

## Introductory Courses

**Note: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.**

### MUSIC 100 Elements of Musical Notation

Fall or spring, weeks 2–5. 1 credit.

Prerequisite: concurrent enrollment in any three-credit course in music and permission of instructor. D. Conn.

This four-week course, given at the beginning of each term, will fulfill the requirement of basic pitch and rhythm and reading skills needed for introductory courses (except 101 and 103) and 200-level courses with prerequisites. The material covered in this course is no longer part of Music 105.

### MUSIC 101 The Art of Music #

Fall. 3 credits. 1-hour disc to be arranged.  
M. Hatch.

Topic for fall 1998: Popular Music in America: 1850 to 1985. A survey of the history and diverse streams of popular music in America. Elementary vocabulary and techniques for describing, analyzing, and evaluating music. Relationships between mainstream musics, tributaries, and side-streams; between folk, art, and popular musics; and between American musics and other musics in the world.

### MUSIC 103 Introduction to the Musics of the World @

Fall. 3 credits. 1-hour disc to be arranged.  
No previous training in music required.  
J. Peraino.

Exploration of musical genres from selected regions of the world. The course examines both the elements of musical styles and the features of society that influence music. Listening assignments are major components of the course.

### MUSIC 105 Introduction to Music Theory

Fall or summer, spring. 3 credits. Plus two hours to be arranged. Experience in reading music is highly recommended.

Fall, S. Tucker; spring, D. Yearsley.

An elementary, self-contained introduction to music theory emphasizing fundamental musical techniques, theoretical concepts, and

their application. Intervals, scales, triads; basic concepts of tonality; extensive listening to music in various styles; analysis of representative works of Bach, Mozart, Haydn and Beethoven.

### [MUSIC 106 Introduction to Music Theory

3 credits. Prerequisite: Music 105 with grade of B- or better. Limited to 50 students. Not offered 1998–99.]

### MUSIC 107 Hildegard to Handel

Fall. 3 credits. Prerequisite: ability to read music or concurrent enrollment in Music 100. R. Harris-Warrick.

The music of Western Europe from the Middle Ages through the Baroque period. Starting from Gregorian chant and the monophonic works of Hildegard von Bingen (celebrating her 900th birthday this year), this course will survey composers and repertoires such as the troubadours, the Notre Dame School, Renaissance sacred polyphony, madrigals, the dance suite, concertos, cantatas, and will end in the early 18th century with works by Vivaldi, Bach, and Handel.

### MUSIC 108 Mozart to Minimalism

Spring. 3 credits. Prerequisite: ability to read music or concurrent enrollment in Music 100. N. Zaslaw.

A survey of Western art music in many genres from the second half of the 18th century to the present. Composers whose music will be studied include Haydn, Mozart, Beethoven, Schumann, Mendelssohn, Berlioz, Chopin, Wagner, Verdi, Liszt, Brahms, Mahler, Debussy, Strauss, Stravinsky, Bartók, Ives, Webern, Messiaen, Copland, Bernstein, Carter, Stucky, and Sierra.

### MUSIC 201 Diction for Oral Presentation

Fall or spring. 1 credit. Prerequisite: permission of instructor. J. Kellock.

Introduction to the uses of the International Phonetic Alphabet for pronunciation of English, French, German, and Italian. Open to singers and non-singers. Assignments will vary according to musical experience. Singing students will be expected to perform their assignments. Students taking voice lessons for credit (321a–322a) must take Music 201 by the end of the third semester of lessons.

## Music Theory

Students contemplating the music major are strongly advised to take Music 151, 152, 153, and 154 in the freshman year; in any case Music 152 and 154 must be completed no later than the end of the sophomore year. Students contemplating Option II must complete Music 252 and 254 by the end of the sophomore year.

### MUSIC 151 Tonal Theory I

Fall. 3 credits. Prerequisites: admission by departmental placement exam and concurrent enrollment in or previous credit for Music 153, or equivalent. Intended for students expecting to major in music and other qualified students. E. Murray.

Detailed study of the fundamental elements of tonal music: rhythm, scales, intervals, triads; melodic principles and 2-part counterpoint; diatonic harmony and 4-part voice leading in root position and first inversion; analysis of phrase and period structure.

**MUSIC 152 Tonal Theory II**

Spring. 3 credits. Prerequisites: Music 151 and 153 or equivalent, and concurrent enrollment in or previous credit for Music 154. Intended for students expecting to major in music and other qualified students. A grade of B- or better in Music 152 is required for admission to the music major. E. Murray.

Continued study of voice leading and harmonic progression, including diatonic modulation; analysis of binary and ternary forms.

**MUSIC 153 Musicianship I**

Fall. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 151. Intended for students expecting to major in music and other qualified students. 3 hrs. TBA. E. Murray.

Sight singing: diatonic melodies in treble, alto, and bass clefs. Keyboard: scales, triads, seventh chords, short diatonic chord progressions. Dictation: intervals, rhythms; short diatonic melodies; short diatonic chorale phrases. Score reading: 2 parts using treble, alto, and bass clefs. Musical terms: tempo markings and rhythmic terminology.

**MUSIC 154 Musicianship II**

Spring. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 152. Intended for students expecting to major in music and other qualified students. A grade of B- or better in Music 154, and failure in none of the individual musicianship components of the course, are required for admission to the music major. 3 hrs. TBA. E. Murray.

Sight singing: longer melodies in 3 clefs, including diatonic modulation. Keyboard: diatonic chord progressions and sequences. Dictation: intervals, rhythms; longer melodies; chorale phrases with diatonic modulation. Score reading: 3 parts using treble, alto, and bass clefs. Musical terms: nuance and expression marks.

**MUSIC 239 Introduction to Improvisational Theory**

Fall. 2 credits. Prerequisite: permission of instructor. Intended for performers in "jazz" and related styles. K. Hester.

Tonal, modal, and blues harmonic resources, and the formal structures in which they are embodied. Development of improvisational skills and creation of spontaneous compositions.

**MUSIC 251 Tonal Theory III**

Fall. 3 credits. Prerequisites: Music 152 and 154 or equivalent, and concurrent enrollment in Music 253. J. Webster.

Continuation of diatonic and introduction to chromatic harmony; species counterpoint; composition in small forms.

**MUSIC 252 Tonal Theory IV**

Spring. 3 credits. Prerequisites: Music 251 and 253 or equivalent, and concurrent enrollment in Music 254. J. Webster.

Study of and composition in larger forms, including sonata form; systematic study of chromatic harmony, voice-leading, and modulation; composition in chromatic style.

**MUSIC 253 Musicianship III**

Fall. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 251. 2 hours TBA. J. Webster.

Sight singing: melodies with chromaticism in treble, alto, tenor, and bass clefs. Keyboard:

diatonic modulation, chromatic chords.

Dictation: melodies with modulation; chorale phrases with secondary dominants and other chromatic chords. Score reading: 4 parts using treble, alto, tenor, and bass clefs.

Musical terms: orchestral ranges, terms, clefs, and transpositions.

**MUSIC 254 Musicianship IV**

Spring. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 252. 2 hours TBA. J. Webster.

Sight singing: melodies in 4 clefs, including modality and chromatic modulation. Keyboard: chromatic sequences, chromatic modulations, improvised modulations employing diatonic pivot chords. Dictation: intervals, rhythms, short melodies and short, diatonic chorale phrases. Score reading: 4 parts, including transposing instruments. Musical terms: other terms in French, German, and Italian.

**MUSIC 351 Materials of Twentieth-Century Music**

Fall. 3 credits. Prerequisite: Music 252 and 254 or equivalent, and concurrent enrollment in Music 353. R. Sierra.

Introduction to some techniques of twentieth-century music, including extended tonality, modes, twelve-tone technique, set theory and new approaches to form and rhythm. Analysis of representative works by Debussy, Bartók, Webern, Hindemith, Schoenberg, Stravinsky, and others.

**MUSIC 353 Musicianship V**

Fall. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 351. 2 hours TBA. R. Sierra.

Sight singing: advanced chromatic, twelve-tone, and atonal melodies in 4 clefs. Keyboard: continued chromatic harmony; improvised chromatic modulations. Dictation: continued chromatic harmony; atonal sets and melodies; 2-part counterpoint. Score reading: 4 clefs, transpositions. Music terms: twentieth-century terms.

**[MUSIC 451 Counterpoint**

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1998-99. S. Stucky.

Composition in the polyphonic vocal style of the late Renaissance.)

**[MUSIC 452 Topics in Music Analysis**

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1998-99. J. Webster.

A survey of important analytical approaches to tonal music, including thematic-motivic relations, phrase-rhythm, large-scale paragraph construction, structural-tonal voice-leading, and relations among the movements in a multimovement work.]

**MUSIC 453 Introduction to Improvisational Theory**

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. K. Hester.

Study and performance of tonal, modal, and blues harmonic resources; introduction to the formal structures in which these resources are embodied. Includes ear training, work at the keyboard, composing short pieces, and analyzing selected representative works of popular music and African-American art music from 1940 to 1970.

**[MUSIC 454 Composition**

Fall. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1998-99.]

**[MUSIC 455 Conducting**

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1998-99.

Fundamentals of score reading, score analysis, rehearsal procedures and conducting technique; instrumental and choral contexts.]

**MUSIC 456 Orchestration**

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. E. Murray. Orchestration based on nineteenth- and twentieth-century models.

**Music in History and Culture****MUSIC 221 History of Rock Music**

Spring. 3 credits. No previous training in music required. J. Peraino.

This course examines the development and cultural significance of rock music from its origins in blues, gospel, and Tin Pan Alley up to present-day genres of alternative rock and hip hop.

**[MUSIC 222 A Survey of Jazz**

Spring. 3 credits. Enrollment limited. Not offered 1998-99. K. Hester.

This course will trace the evolution of jazz historically from its African roots to the current diverse spectrum of improvisational styles that form popular, Neoclassic, and Innovative contemporary jazz music.]

**MUSIC 245 Gamelan in Indonesian History and Cultures @**

Fall or spring. 3 credits. Permission of instructor. No previous knowledge of musical notation or performance experience necessary. M. Hatch.

An introduction to Indonesia through its art. Elementary techniques of performance on the Javanese *gamelan*; a general introduction to Indonesian history and cultures, and the socio-cultural contexts for the arts there. Several short papers and one longer research report are required.

**[MUSIC 261 Bach and Handel #**

Fall. 3 credits. Prerequisite: any 3-credit course in music or permission of instructor. Not offered 1998-99. D. Yearsley.]

**[MUSIC 262 Haydn and Mozart #**

Fall. 3 credits. Prerequisite: any 3-credit course in music or permission of instructor. Not offered 1998-99. N. Zaslaw.

Music for courts, theaters, churches, concerts, dancing, marching, public and private ceremonies, and domestic use by two extraordinarily different musical personalities who were friends, explored in its historical and socio-cultural contexts.]

**MUSIC 263 Beethoven #**

Spring. 3 credits. Prerequisite: any 3-credit course in music or permission of instructor. J. Webster.

A survey of Beethoven's life, works, and influence. While the primary focus will be his musical style and its development, the course will also cover social-cultural factors and the psychology and reception of genius.

**[MUSIC 264 Musical Romanticism #**

Spring. 3 credits. Prerequisite: any 3-credit course in music or permission of instructor. Not offered 1998-99.

D. Rosen.

This survey of music from 1815 to 1900 will be divided into five segments focusing on five composers (Schubert, Berlioz, Verdi, Wagner, and Mahler) and two or three segments on broader topics, such as musical nationalism in Russia, fin de siècle Vienna, the art song, and the history of the piano and its music.]

**[MUSIC 274 Opera #**

Fall. 3 credits. D. Rosen.

An introduction to major works of the operatic repertory, with discussion of texts and theatrical performances as well as music. Video recordings will be an integral part of the course; trips to live performances will be scheduled where possible.

**[MUSIC 275 The Choral Tradition #**

Spring. 3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1998-99.

A survey of representative works, both sacred and secular, in the Western choral tradition from the Middle Ages to the twentieth century. Class will include discussion of performances as well as historical and stylistic issues, and will be integrated with local concert offerings whenever possible.]

**[MUSIC 276 The Orchestra and Its Music #**

Spring. 3 credits. Prerequisite: any three credit music course or permission of instructor. Not offered 1998-99.

N. Zaslaw.

The music of, and the social structures supporting, large instrumental ensembles in the Western world, including Italian court festivals of the 16th century, string bands of the 17th century, Lully's ascendancy at Paris and Versailles, and music of Purcell, Corelli, Vivaldi, Bach, Handel, Haydn, Mozart, Beethoven, Schubert, Schumann, Mendelssohn, Berlioz, Liszt, Wagner, Brahms, Tchaikovsky, Bruckner, Mahler, Strauss, Stravinsky, Schoenberg, Webern, Bartók, Shostakovich, Messiaen, Copland, Carter, Tower, Stucky, Sierra, and others.]

**[MUSIC 372 Mind and Memory (also ENGL 301, THETR 301)**

Spring. 4 credits. Staff.

See English 301 for description.

**Music History Courses for Majors and Qualified Non-Majors**

Prerequisite: Music 152 or permission of instructor. Intended primarily for music majors, these courses investigate selected topics and repertoires from each period in some detail. Each course includes listenings, readings, oral and written papers, and analyses.

\*See the list of courses with overlapping content at the end of the introduction.

**[MUSIC 374 Opera and Culture (also Gerst 374 and Itala 374)**

Spring. 4 credits. Prerequisite: any three-credit music course or proficiency in German or Italian. Not offered 1998-99.

A. Groos.]

**[MUSIC 381 Music in Western Europe to 1700 #**

Fall. 4 credits. Not offered 1998-99.

R. Harris-Warrick.

Western European music from the Middle Ages to the early Baroque, including Gregorian chant, secular monophony, the development of polyphony, the birth of opera, and the rise of independent instrumental music.]

**[MUSIC 382 Music of the Eighteenth Century #**

Spring. 4 credits. Not offered 1998-99.

J. Webster.

Music in Western and Central Europe and North America from Bach, Handel and Vivaldi to Haydn and Mozart, including comic and serious opera, church music, concert music, and social music.]

**[MUSIC 383 Music of the Nineteenth Century #**

Fall. 4 credits. D. Rosen.

A chronological survey of nineteenth-century music from Beethoven through Puccini including reference to its cultural and historical context.

**[MUSIC 384 Music of the Twentieth Century**

Spring. 4 credits. S. Stucky.

Movements, schools, and styles in "classical" music from the turn of the century to the present. Extensive listening and reading assignments for historical breadth; detailed attention to representative works for analytical depth.

**[MUSIC 388 Historical Performance Practicum #**

Spring. 4 credits. Not offered 1998-99.

M. Bilson.

The study of 18th- and 19th-century instrumental performance practices, with special emphasis on the string quartets of Haydn and the piano trios of Schubert. Open to qualified performers.]

**[MUSIC 398-399 Independent Study in Music History**

398, fall; 399, spring. 4 credits. Prerequisite: Music 152 and permission of instructor. Staff.

Advanced study of various topics in music history. Students enrolling in Music 398-399 participate in, but do not register for, an approved 200-level music history course and, in addition, pursue independent research and writing projects.

**[MUSIC 410 Music and Monstrous Imaginings (also S HUM 410)**

Fall. 4 credits. Permission of instructor.

A. Richards.

See S HUM 410 for description.

**[MUSIC 411 Improvisation, Music, History (also S HUM 411)**

Spring. 4 credits. Permission of instructor.

A. Richards.

See S HUM 411 for description.

**[MUSIC 489 African American Music Innovators (also AS&RC 489)**

Fall. 4 credits. Permission of instructor.

Not offered 1998-99.]

**[MUSIC 490 American Musical Theatre (also English 454)**

Spring. 4 credits. S. McMillin.

See English 454 for description.

**[MUSIC 492 Music and Queer Identity**

Spring. 4 credits. Prerequisite: Music 152 or permission of instructor. Not offered 1998-99. J. Peraino.

Throughout history music has been associated with "otherness" in Western cultures. Appropriately, lesbian and gay individuals and communities have turned to music as a means of expressing and negotiating their "queer" identity within status-quo culture. This course examines how and why music encodes "queerness" by focusing on various musical genres (such as opera, disco, women's music, country) and composer/musicians (such as Franz Schubert, Judy Garland, David Bowie) that have become significant for various lesbian and gay communities. The course will also examine the reasons behind the general popularity of queer-coded but "straight-identified" performers such as Elvis Presley, Prince, and Michael Jackson.]

**[MUSIC 493 Women and Music (also WOMNS 496)**

Spring. 4 credits. Prerequisite: Music 152 or permission of instructor. J. Peraino.

This course introduces the students to a critical examination of women's participation in Western European and American musical traditions. The course will focus on the various subject positions and critical perspectives that women hold in examples of music and writings about music. Of primary importance will be the concepts of "objective" vs. "subjective" approaches to the topic of the week. Topics will include Approaches to History and Criticism, Women Composers, Women Performers, Women as Objects, Women's Music, Drag and Androgyny, and Women as Listeners. Students will be asked to keep a journal of their reactions to the readings, listening assignments, and class discussions, and to write "objective" and "subjective" formal papers.

**Independent Study****[MUSIC 301-302 Independent Study in Music**

301, fall; 302, spring. Credit to be arranged. Prerequisite: departmental approval. Presupposes experience in the proposed area of study. Staff.

**Honors Program****[MUSIC 401-402 Honors in Music**

401, fall; 402, spring. 4 credits each term. Limited to honors candidates in their senior year. Staff.

**Digital Music and New Media****[MUSIC 120 Learning Music through Digital Technology**

Fall or spring. 3 credits. Enrollment limited. Prerequisite: permission of instructor. D. Borden.

This course uses selected commercially available technological resources to produce live music. The student is expected to master the Macintosh computer, several music software programs, and several synthesizers using MIDI. The ability to read music is helpful but not necessary. There are no papers to write; homework is presented in three classroom concerts. The final is a live presentation of the student's final project in a concert open to the public.

**MUSIC 220 Learning Counterpoint through Digital Technology**

Spring. 3 credits. Enrollment limited.  
Prerequisite: 152 and permission of instructor. D. Borden.

This course is a study of traditional contrapuntal techniques from the fourteenth century to the present, with emphasis on invention and fugue. Synthesizers, samplers, MIDI, and music software will be covered. There are three classroom concerts, some analysis and a final public concert.

**MUSIC 391 Media Arts Studio I (also THETR 391, ART 391, ARCH 391)**

Fall. 3 credits. Permission of instructor.  
See THETR 391 for description.

**MUSIC 392 Media Arts Studio II (also THETR 392, ART 392, ARCH 392)**

Spring. 3 credits. Permission of instructor.  
See THETR 392 for description.

**MUSIC 420 Introduction to MIDI Techniques**

Spring. 4 credits. Permission of instructor.  
D. Borden.

This course is an introduction to MIDI for students who are already at an advanced level in music composition. Three composition projects will be completed in collaboration with film, dance, and computer animation students.

**[MUSIC 620 Introduction to MIDI Techniques]**

Spring. 4 credits. Permission of instructor.  
Not offered 1998-99. D. Borden.]

**Musical Performance**

Cornell faculty members offer individual instruction in voice, organ, harpsichord, piano and fortepiano, and some brass and woodwind instruments to those students advanced enough to do college-level work in these instruments. Lessons are available by audition only. They may be taken either without credit or, through Music 321-322, with credit. Other instruments may sometimes be studied for credit outside Cornell, but also by audition only (see Music 321h-322h). Cornell does not offer instruction at the beginner's level.

**Lessons for beginners.** The Music Department can recommend outside teachers for those who wish to begin studying voice or an instrument. No credit is available for beginning instruction.

**Auditions.** Auditions are held at the beginning of each term for lessons for advanced students. Contact the Department of Music office (104 Lincoln Hall) for information.

**Fees.** The fee for a one-half hour lesson weekly, *without credit*, is \$150 per term. For a one-hour lesson (or two half-hour lessons) weekly, *without credit*, the fee is \$300. The fee in Music 321-322 for a one-hour lesson (or two half-hour lessons) *for credit* is \$225 per term. All fees are non-refundable once lessons begin, *even if the course is subsequently dropped*.

**Scholarships.** Music majors receive a scholarship equal to the lesson fee listed above. Members of the department-sponsored organizations and ensembles may, with the permission of the director of the organization, receive a scholarship of up to \$150 of the Cornell fee for the type of lessons chosen

during the term. (These scholarships are intended only for lessons in the student's primary performing medium.) Scholarship forms, available in the Music Department office, are to be returned to the office *within the first three weeks of classes*.

**Practice rooms.** Practice-room fees for twelve hours weekly are \$50 per term and for six hours weekly are \$40 per term for a room **with a piano**. Practice-room fees for twelve hours weekly are \$25 per term and for six hours weekly are \$15 per term for a room **without a piano**. The fee for the use of the pipe organ is \$50 for twelve hours weekly and \$40 for six hours weekly. All fees are non-refundable.

**Earning credit.** For every 4 credits earned in Music 321-322, the student must have earned, or currently be earning, at least 3 credits in another music course (excluding freshman seminars, Music 321-322, 331 through 340, 323-324, or 421 through 448). These 3 credits must be earned prior to, or simultaneously with the first 2 credits in 321-322; they cannot be applied retroactively. Transfer credit for appropriate music courses already taken elsewhere may be used to satisfy this requirement with the approval of the department.

**Lessons taken outside Cornell.** Under certain conditions, advanced students may earn credit for lessons taken outside Cornell. An audition is required, and no credit can be granted for beginning instruction. For further information, read the description of Music 321h-322h and contact the Music Department office.

**MUSIC 321-322 Individual Instruction in Voice, Organ, Harpsichord, Piano, Strings, Woodwinds, and Brass**

Prerequisite: advanced students may register only after a successful audition with the instructor, usually scheduled during the first week of classes, and will receive credit only as described under "Earning credit," above. Students may register for this course in successive years. Students, at the sole discretion of the instructor, earn 2 credits each term for a one-hour lesson (or two half-hour lessons) weekly accompanied by an appropriate practice schedule.

**MUSIC 321a-322a Individual Instruction in Voice**

321a, fall; 322a, spring. 2 credits each term. Prerequisite: successful audition during registration. Music 201 must be taken by the end of the third semester of lessons. Limited enrollment. Attendance at weekly studio class required for *all* credit students. J. Kellock.

The Vocal Coaching Program offers noncredit lessons to members of the choral ensembles.

**MUSIC 321b-322b Individual Instruction in Organ**

321b, fall; 322b, spring. 2 credits each term. Prerequisite: successful audition.  
D. Yearsley.

**MUSIC 321c-322c Individual Instruction in Piano**

321c fall; 322c, spring. 2 credits each term. Prerequisite: successful audition.  
M. Bilson, X. Bjerken and staff.

**MUSIC 321d-322d Individual Instruction in Harpsichord**

321d, fall; 322d, spring. 2 credits each term. Prerequisite: successful audition.  
D. Yearsley.

**[MUSIC 321e-322e Individual Instruction in Violin or Viola]**

321e, fall; 322e, spring. 2 credits each term. Prerequisite: successful audition.  
Not offered 1998-99. Staff.]

**[MUSIC 321f-322f Individual Instruction in Cello]**

321f, fall; 322f, spring. 2 credits each term. Prerequisite: successful audition. Not offered 1998-99.]

**MUSIC 321g-322g Individual Instruction in Brass**

321g, fall; 322g, spring. 2 credits each term. Prerequisite: successful audition.  
M. Scatterday.

**MUSIC 321h-322h Individual Instruction outside Cornell**

321h, fall; 322h, spring. 2 credits each term. Prerequisite: successful audition.  
Coordinator: D. Conn.

All the standard orchestral and band instruments, keyboard instruments, guitar and voice may, under certain conditions, be studied for credit with outside teachers. This course is available primarily for the study of instruments not taught at Cornell and for the use of those who for reasons of space cannot be admitted to Music 321-322. Prior approval and audition by a member of the faculty in the department is required, and credit may be earned only as described under "Earning credit," above. For information and a list of approved teachers, consult the department office, 104 Lincoln Hall.

**MUSIC 321i-322i Individual Instruction in Woodwinds**

321i, fall; 322i, spring. 2 credits each term. Prerequisite: successful audition.  
D. Conn.

**MUSIC 323-324 Advanced Individual Instruction**

323, fall; 324, spring. 4 credits each term. Open only to juniors and seniors majoring in music under Option II with concentration in performance and to graduate students. Option II majors whose lessons must be taken outside Cornell may apply to the department for financial assistance toward the cost of lessons; \$225 per semester will normally be awarded to such students and a larger amount may be awarded under certain circumstances. Music 323 is not a prerequisite to 324.

**Musical Organizations and Ensembles**

Students may participate in musical organizations and ensembles throughout the year. Permission of the instructor is required, and admission is by audition only (usually at the beginning of each semester), except that the Sage Chapel Choir and the Cornell Gamelan Ensemble are open to all students without prior audition. Registration is permitted in two of these courses simultaneously and students may register in successive years, but no student may earn more than 8 credits in these courses. Membership in these musical organizations and ensembles is also open to qualified students who wish to participate without earning credit.



**MUSIC 331-332 Sage Chapel Choir**

331, fall or summer; 332, spring. 1 credit.  
No audition for admission. T. Folan.

**MUSIC 333-334 Cornell Chorus or Glee Club**

333, fall; 334, spring. 1 credit. Prerequisite: permission of instructor. Chorus (treble voices): W 5:15-7:15 p.m. plus 2 hours to be arranged. Glee Club (mens voices): W 7:30-9:30 p.m., plus 2 hours to be arranged. Fall, S. Tucker; spring, staff.

**MUSIC 335-336 Cornell Symphony Orchestra**

335, fall; 336, spring. 1 credit. Prerequisite: permission of instructor. W 7:30-10:00 p.m. E. Murray.

**MUSIC 337 Wind Symphony**

Fall. 1 credit. Prerequisite: permission of instructor. M W 4:45-6:30. M. Scatterday and D. Conn.

**MUSIC 338 Symphonic Band**

Spring. 1 credit. Prerequisite: permission of instructor. M W 4:45-6:30. D. Conn.

**MUSIC 339-340 Cornell Jazz Ensembles**

339, fall; 340 spring. 1 credit. Prerequisite: permission of instructor. W 6-8 p.m. K. Hester.

**MUSIC 342 Wind Ensemble**

Spring. 1 credit. Prerequisite: permission of instructor. M 7:30-9:30 and R 4:45-6:30. M. Scatterday.

**[MUSIC 345-346 Introduction to the Gamelan @**

345 fall; 346 spring. 1 credit. Enrollment limited. Prerequisite: permission of instructor. M W 2:30-3:20. Not offered 1998-99.

Concentrated instruction for beginning students in elementary techniques of performance on the Indonesian *gamelan*. Music 245 is a 3-credit course that complements the instruction in *gamelan* by an introduction to Indonesian history and cultures.]

**MUSIC 421-422 Cornell Chamber Orchestra**

421, fall; 422 spring. 1 credit. Prerequisite: permission of instructor. T 5-6:30 p.m. J. Hsu.

Study and performance of the chamber symphonies of Haydn, Mozart, and their contemporaries. For strings, woodwinds, and horns. More recent music may also be included in the spring.

**MUSIC 437-438 Chamber Winds**

437, fall; 438, spring. 1 credit each term. Prerequisites: enrollment in Symphonic Band, Wind Symphony or Wind Ensemble in the same semester as this course AND permission of instructor only. Fall, T R 4:45-6:30 p.m. Spring, T F 4:45-6:30 p.m. M. Scatterday, D. Conn.

A flexible instrumentation ensemble performing original woodwind, brass, and percussion music from Gabrieli brass choirs and Mozart serenades through more contemporary works such as Stravinsky's Octet or premiers of works. The ensemble will perform on wind symphony, symphonic band and wind ensemble concerts in addition to several chamber concerts throughout the year.

**MUSIC 439-440 Experimental Lab Ensemble**

439 fall. 440 spring. 1 credit each term. Permission of instructor. W 8:30-10:30 p.m. K. Hester.

**MUSIC 441-442 Chamber Music Ensemble**

441, fall; 442, spring. 1 credit. Prerequisite: permission of instructor. J. Hsu. Study and perform chamber music works from duos to octets for pianists, string and wind players.

**MUSIC 443-444 Chorale**

443 fall; 444 spring. 1 credit each term. Prerequisite: permission of instructor. F 4:30-6:15 p.m. R. Riley.

Study and performance of selected choral music for mixed voices.

**MUSIC 445-446 Cornell Gamelan Ensemble**

445 fall; 446 spring. 1 credit each term. Enrollment limited. Prerequisite: Music 245 or 345-346, or permission of instructor. R 7:30-10:00 p.m. M. Hatch.

Advanced performance on the Javanese *gamelan*. Tape recordings of *gamelan* and elementary number notation are provided. Some instruction by Indonesian musicians is offered in most years.

**MUSIC 447-448 Chamber Singers**

447, fall; 448, spring. 1 credit each term. Prerequisite: permission of instructor. Plus 2 hours to be arranged. V. Shende.

**Graduate Courses**

Open to qualified undergraduates with permission of instructor.

**MUSIC 601 Introduction to Bibliography and Research**

Fall. 4 credits. M 1:25-4. L. Coral. This course explores the nature of the discipline and introduces the many types of bibliographic tools, both printed and electronic, needed to pursue research in music.

**[MUSIC 602 Analytical Technique**

Spring. 4 credits. Not offered 1998-99. J. Webster.

A critical survey of various analytical methods in current use. Frequent analytical assignments and class presentations.]

**[MUSIC 603 Editorial Practice**

Spring. 4 credits. Not offered 1998-99.]

**MUSIC 604 Ethnomusicology: Areas of Study and Methods of Analysis**

Spring. 4 credits. Open to graduate students in anthropology, linguistics, psychology, sociology, and other cognate fields with permission of instructor. M. Hatch.

Major aspects of research into musical cultures of the world. Problems, theories, and methods, especially those affecting analytical terminology, transcription and analysis of sound events, and fieldwork.

**[MUSIC 622 Historical Performance Practicum**

Spring. 4 credits. Not offered 1998-99. M. Bilson.

The study of 18th- and 19th-century instrumental performance practices, with special emphasis on the string quartets of Haydn and

the piano trios of Schubert. Open to qualified performers.]

**MUSIC 653 Topics in Tonal Theory and Analysis**

Spring. 4 credits. J. Webster. Topic for 1999: Schenker.

**[MUSIC 654 Topics in Post-tonal Theory and Analysis**

Spring. 4 credits. Not offered 1998-99.]

**MUSIC 657-658 Composition**

657, fall; 658, spring. 4 credits each term. F 1:25-4:00 p.m. plus 1 hour to be arranged. Fall, R. Sierra, S. Stucky; spring, S. Stucky.

**MUSIC 674 German Opera (also German Studies 672)**

Spring. 4 credits. A. Groos. See German Studies for description.

**[MUSIC 677 Mozart: His Life, Works, and Times (also German 757)**

Fall. 4 credits. Not offered 1998-99.]

**[MUSIC 680 Topics in Ethnomusicology**

Spring. 4 credits. M. Hatch. Not offered 1998-99.]

**MUSIC 681 Seminar in Medieval Music**

Fall. 4 credits. J. Peraino. Topic: Medieval Music and Intellectual History.

**[MUSIC 684 Seminar in Renaissance Music**

Fall. 4 credits. Not offered 1998-99.]

**MUSIC 686 Seminar in Baroque Music**

Fall, R. Harris-Warrick; spring, N. Zaslaw. 4 credits.

Fall topic: Seventeenth-century opera, including Venetian opera, the tragédie en musique, opera-ballet, and early opera seria. Spring topic: Handel.

**[MUSIC 688 Seminar in Classical Music**

Fall. 4 credits. Not offered 1998-99. J. Webster.]

**[MUSIC 689 Seminar in Music of the Romantic Era**

Spring. 4 credits. Not offered 1998-99. D. Rosen.]

**MUSIC 690 Seminar in Music of the Twentieth Century**

Fall. 4 credits. S. Stucky. Topic: Lutoslawski.

**MUSIC 691-692 Historical Performance**

691, fall; 692, spring. 4 credits each term. Prerequisite: permission of instructor. Hours to be arranged. M. Bilson. Lessons on the major instrument with supplementary study and research on related subjects.

**[MUSIC 693 Seminar in Performance Practice**

Fall or spring. 4 credits. Not offered 1998-99.]

**MUSIC 697-698 Independent Study and Research**

697, fall; 698, spring. Credit to be arranged. Staff.

**[MUSIC 785-786 History of Music Theory**

785, fall; 786, spring. 4 credits each term. Not offered 1998-99.]

**[MUSIC 787 History and Criticism**

Spring. 4 credits. Not offered 1998-99. A. Richards.]

**[MUSIC 789 Liturgical Chant in the West]** Spring. 4 credits. Not offered 1998-99.]

**MUSIC 901-902 Thesis Research**

901, fall; 902, spring. Up to 6 credits each term, to be arranged. Offered for S-U only.

Limited to doctoral students in music who have passed the Admission-to-Candidacy Exam.

## NEAR EASTERN STUDIES

R. Brann, chair; K. Haines-Eitzen, Y. Halevi-Wise, D. I. Owen, (director of the Program of Jewish Studies); L. Peirce, D. Powers (director of Undergraduate Studies), G. Rendsburg (director of Graduate Studies), D. Ruggles, N. Scharf, S. Shoer, L. White, M. Younes, J. Zorn

Joint faculty: M. Bernal

### The Department

The Department of Near Eastern Studies (360 Rockefeller Hall, 255-6275) offers courses in the archaeology, history, religions, languages, and literatures of the Near East. Students are encouraged to take an interdisciplinary approach to the religions and cultures of the region which has had an important impact on the development of antique, medieval, and modern civilization. The department's course offerings treat the Near East from the dawn of history to the present and emphasize methods of historical and literary analysis.

### Distribution Requirements

Any two Near Eastern Studies history or archaeology courses at the 200, 300 or 400 level that form a reasonable sequence or combination satisfy the distribution requirement in the social sciences/history. Any two Near Eastern Studies civilization or literature courses at the 200, 300, or 400 level that form a reasonable sequence or combination satisfy the distribution requirement in the humanities. NES 197, 198 or a 200-level survey course plus any other Near Eastern studies course will constitute a sequence to fulfill the distribution requirement in either social sciences/history or humanities, depending on the second course used in combination with 197, 198 (or a 200-level survey course). All 200 or 300-level language courses may fulfill the humanities requirement.

### The Major

The precise sequence and combination of courses chosen to fulfill the major is selected in consultation with the student's adviser. All majors must satisfy the following requirements (no course may be used to satisfy two requirements; S-U options not permitted):

- A. Qualification in two Near Eastern languages or proficiency in one.
- B. Nine three- or four-credit NES courses, which must include the following:
  1. NES 197 or 198 (when NES 197-198 are not offered, students may substitute a 200-level survey course with the approval of the director of undergraduate studies).
  2. Two 200-level NES survey courses, one whose chronological parameters fall within the period 3000 B.C.E to 600

C.E., and one whose chronological parameters fall within the period 600 C.E. to the present. The following are examples (a complete list can be obtained in the department office):

3000 B.C.E to 600 C.E.

NES 223, Introduction to the Bible

NES 263, Introduction to Biblical History and Archaeology

NES 248, Introduction to Classical Jewish History

600 C.E. to the present

NES 233, The Lyrics of Love and Death: Medieval Hebrew and Arabic Poetry in Translation

NES 257, Islamic History 600-1258

NES 258, Islamic History 1258-1914

NES 294, Modern History of the Near East

3. At least two NES courses at the 300 level or above (one of which may be NES 301, 302, 311, or 312).

Prospective majors should discuss their plans with the director of undergraduate studies before formally enrolling in the department. To qualify as a major, a cumulative grade average of C or better is required.

**Honors.** Candidates for the degree of Bachelor of Arts with honors in Near Eastern Studies must fulfill the requirements of the appropriate major study and enroll in the honors course, NES 499, in the fall and spring semesters of their senior year. For admission to the honors program, candidates must have a cumulative average of B+ or better and have demonstrated superior performance overall in Near Eastern Studies courses. After consulting their major adviser, candidates should submit an outline of their proposed honors work to the department **during the second semester of their junior year.**

**Study abroad.** Near Eastern Studies majors may choose to study in the Near East during their junior year. There are various academic programs in the countries of the Near East that are recognized by the Department of Near Eastern Studies and that allow for the transfer of credit. Archaeological field work on Cornell-sponsored projects in the Near East may also qualify for course credit.

### Freshman Seminar

**NES 127 What's Love Got To Do With It? Marriage and Courtship in the Hebrew Bible**

Fall and spring. 3 credits. Enrollment limited to 15. C. Smith.

We will read selections from the Hebrew Bible (in translation) and examine the portrayal of courtship and marriage in its laws, poetry, and narratives.

**NES 150 Discovering Islam**

Spring. 3 credits. Enrollment limited to 15 students. D. Powers.

Against the backdrop of Western stereotypes, we will explore Islamic society and culture from within, with special attention to prophecy and revelation, ritual practice, criminal law, the status of women, and the Islamic understanding of death and resurrection.

## Language Courses

**NES 101-102 Elementary Modern Hebrew I and II (also JWST 105-106)**

101, fall; 102, spring. 6 credits each term. Prerequisite for NES 102: 101 or permission of instructor. Satisfactory completion of NES 102 fulfills the qualification portion of the language requirement. Enrollment limited to 15 students in each section. S. Shoer.

Intended for beginners. This course provides a thorough grounding in reading, writing, grammar, oral comprehension and speaking. Students who complete the course will be able to function in basic situations in a Hebrew-speaking environment.

**NES 111-112 Elementary Arabic I and II**

111, fall; 112, spring. Enrollment limited to 15 in each session. 6 credits each term. Prerequisite for Arabic 112: Arabic 111 or permission of instructor. L. White.

The course provides a thorough grounding in all language skills: listening, speaking, reading, and writing. It starts with spoken Arabic and gradually integrates Modern Standard Arabic in the form of listening and reading texts. Emphasis will be on learning the language through using it in meaningful contexts. The student who successfully completes the two-semester sequence will be able to: 1) understand and actively participate in simple conversations involving basic practical and social situations (introductions, greetings, school, home and family, work, simple instructions, etc.); 2) read Arabic material of limited complexity and variety (simple narrative and descriptive texts, directions, etc.); 3) write notes and short letters describing an event or a personal experience. An important objective of the course is to familiarize students with basic facts about the geography, history, and culture of the Arab world.

**NES 201-202 Intermediate Modern Hebrew I and II (also JWST 201-202) @**

201, fall; 202, spring. Enrollment limited to 15 students in each section. 4 credits each term. Prerequisites for NES 201, 102 or permission of instructor; for NES 202, 201 or permission of instructor. N. Scharf.

A sequel to NES 101-102. Continued development of reading, writing, grammar, oral comprehension, and speaking skills. The course introduces Hebrew literature and Israeli culture through the use of texts and audio-visual materials.

**NES 211-212 Intermediate Arabic I and II @**

211, fall; 212, spring. Enrollment limited to 15 students in each section. 4 credits each term. Prerequisites: for NES 211, one year of Arabic or permission of instructor; for NES 212, 211 or permission of instructor. M. Younes, L. White.

A sequel to NES 111-112. Continued development of the four language skills through extensive use of graded materials on a wide variety of topics. Increasing attention will be given to developing native-like pronunciation and to grammatical accuracy, but the main focus will be on developing communication skills. The student who successfully completes 212 will be able to: 1) understand and express himself or herself in Arabic in situations beyond the basic needs; 2) read and comprehend written Arabic of

average difficulty; 3) write a letter, a summary of a report or a reading selection. An appreciation of Arabic literature and culture will be sought through the use of authentic materials.

**NES 301-302 Advanced Modern Hebrew I and II (also JWST 301-302) @**

301, fall; 302, spring. Limited to 15 students. 4 credits each term. Prerequisite for NES 301: 202 or equivalent, with permission of instructor. Prerequisite for NES 302: 301 or equivalent, with permission of instructor. This sequence may be used to fulfill the humanities distribution requirement in literature. Limited to 15 students. N. Scharf.

Advanced study of Hebrew through the analysis of literary texts and expository prose. This course employs a double perspective: language is viewed through literature and literature through language. Students will develop composition skills by studying language structures, idioms, and various registers of style.

**NES 311 Advanced Arabic I @**

Fall. 4 credits. Prerequisite: NES 212 or permission of instructor. Limited to 15 students. M. Younes.

Students will be introduced to authentic, unedited Arabic language materials ranging from poems, short stories, and plays to newspaper articles dealing with social, political, and cultural issues. Emphasis will be on developing fluency in oral expression through discussions of issues presented in the reading selections. A primary objective of the course is the development of writing skills through free composition exercises in topics of interest to individual students.

**NES 312 Advanced Arabic II @**

Spring. 4 credits. Limited to 15 students. Prerequisite: NES 311, or permission of instructor. M. Younes.

This course is a continuation of NES 311 using similar but more challenging materials. There will be more focus on the writing skills, the development of native-like pronunciation, and accurate use of grammatical structures than in NES 311. Each student will be required to make an oral presentation in Arabic on a topic of his/her choice and submit a written version of the presentation.

**[NES 333-334 Elementary Akkadian I and II (also NES 633-634) @ #**

333, fall; 334, spring. 4 credits. Prerequisite for NES 334: 333 or permission of instructor. Not offered 1998-99. D. I. Owen.]

**[NES 337-338 Ugaritic I and II @ #**

337, fall; 338, spring. 4 credits. Prerequisite: knowledge of another Semitic language (preferably Hebrew). Not offered 1998-99. G. Rendsburg.]

**[NES 416 Structure of the Arabic Language (also LING 416) @**

Spring. 4 credits. Prerequisite: NES 112 or one year of Arabic. Not offered 1998-99. M. Younes.]

**NES 420 Readings in Biblical Hebrew Prose (also JWST 420, RELST 420) @ #**

Spring. 4 credits. Prerequisite: one year of Hebrew, Biblical or modern. Course may be repeated for credit. G. Rendsburg. An advanced course in reading selected portions of the Hebrew Bible. Emphasis will

be placed on the philological method, with attention to literary, historical, and comparative concerns.

**NES 433 Introductory Sumerian I (also NES 631) @ #**

Fall. 4 credits each semester. Prerequisite: permission of instructor. D. Owen.

This course will consist of an introduction to the Sumerian cuneiform script and grammar of the third millennium B.C.E. Readings in selected Sumerian economic, legal, and historical inscriptions, a basic introduction to Sumerian grammar and script, linguistic connections, and a survey and discussion of Sumerian civilization and culture. Students who have taken or plan to take Akkadian, Hebrew, or Hittite linguistics or are otherwise interested in the history of language should consider this course.

**NES 434 Introductory Sumerian II (Also NES 632) @ #**

Spring. 4 credits each semester. Prerequisite: NES 433/631. D. Owen.

Continued study of Sumerian grammar and syntax; further readings in selected Sumerian economic, legal, and historical inscriptions of the late third millennium B.C.E.; additional discussion of Sumerian civilization and culture.

**[NES 435-436 Aramaic I-II (also JWST 435-436) @ #**

435, fall; 436, spring. 4 credits each term. Prerequisite: knowledge of Hebrew. Enrollment limited to 15 students. Not offered 1998-99. G. Rendsburg.]

**NES 631 Introductory Sumerian I (also NES 433) @ #**

Fall. 4 credits. Prerequisite: permission of instructor. D. Owen.

For description, see NES 433 under Near Eastern Languages.

**NES 632 Introductory Sumerian II (also NES 434) @ #**

Spring. 4 credits. Prerequisite: permission of instructor. D. Owen.

For description, see NES 434 under Near Eastern Languages.

**[NES 633-634 Elementary Akkadian I and II (also NES 333-334)**

633, fall; 634, spring. 4 credits. Prerequisite for NES 634: 633 or permission of instructor. Not offered 1998-99. D. Owen.]

**[NES 637-638 Ugaritic I and II (also NES 337-338)**

637, fall; 638 spring. 4 credits. Prerequisite: knowledge of another Semitic language (preferably Hebrew). Not offered 1998-99. G. Rendsburg.]

## Archaeology

**NES 261 Ancient Seafaring (also ARKEO 275, JWST 261) @ #**

Fall. 3 credits. Enrollment limited to 80 students. D. Owen.

A survey of the history and development of archaeology under the sea. The role of nautical technology and seafaring among the maritime peoples of the ancient Mediterranean world—Canaanites, Minoans, Mycenaeans, Phoenicians, Hebrews, Greeks, and Romans—as well as the riverine cultures of Mesopotamia and Egypt. Evidence for maritime trade, economics, exploration and

colonization, and the role of the sea in religion and mythology.

**NES 263 Introduction to Biblical History and Archaeology (also ARKEO 263, JWST 263, and RELST 264) @ #**

Spring. 3 credits. Enrollment limited to 50 students. Staff.

A survey of the principal archaeological developments in Canaan/Palestine from the Neolithic period (ca 9000 B.C.E.) to the Babylonian Exile (586 B.C.E.). Includes an introduction to archaeological methodology utilized in the reconstruction of ancient cultures in the area, as well as the basic bibliography of the field. Emphasis will be placed on the use of archaeological data for the understanding of some major problems in Israelite history and archaeology, such as the dating of the cultural milieu of the patriarchs, the dating and geographical setting of the Exodus and the Israelite conquest, and the origin and history of the Philistines. Recommended for students planning to participate in excavations in Israel.

## Civilization

**NES 157 Introduction to Islamic Civilization (also RELST 157, HIST 157) @ #**

Fall. 3 credits. D. Powers.

This course will present a survey of Islamic history and culture from the seventh century until the Mongol sack of Baghdad in 1258, with special attention to theology, law, sufism, science, philosophy, and art.

**[NES 197 Introduction to Near Eastern Civilization (also JWST 197 and RELST 197) @ #**

Fall. 3 credits each term. Not offered 1998-99. D. Owen.]

**[NES 234 Arabs and Jews: Cultures in Confluence and Conflict (also JWST 234, RELST 234, and COM L 234) @ #**

Fall. 3 credits. Not offered 1998-99. R. Brann.]

**[NES 251 Introduction to Islam: Religion, Politics, and Society (also RELST 252) @ #**

Spring. 3 credits. Not offered 1998-99. A. Gade.]

**[NES 281 Gender and Society in the Muslim Middle East (also RELST 281, WOMNS 281) @ #**

Spring. 3 credits. Limited to 20 students. Not offered 1998-99. L. Peirce.]

**NES 291 Arab Society and Culture**

Fall. 3 credits. Enrollment limited to 25 students. M. Younes.

The focus of this course is Arab society in the 20th century. We will start with a definition of the term "Arab" and address the issue of whether there is one or several Arab nations. This will be followed by a detailed examination of the following topics: the role of religion, history, and language in shaping modern Arab society; Arab identity and the development of Arab nationalism; the Arab-Israeli conflict; the conflict between secular and religious movements; the political systems of the different Arab countries; ethnic and religious groups; the distribution of resources (the super-rich and the destitute) and resulting conflicts; education; and finally the family and the status of women. No prior knowledge of Arabic is required.

**[NES 339 Muslims, Christians, and Jews in Islamic Spain: Literature and Society (also JWST 339, COM L 334, RELST 334, SPANL 339) @ #**

Spring. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. R. Brann.]

**[NES 344 Seminar on Jewish Mysticism (also RELST 344 and JWST 342) #**

Fall. 4 credits. Enrollment limited to 20 students. Not offered 1998-99. Staff.]

**[NES 345 Gender and Judaism (WOMNS 347, RELST 343 and JWST 347)**

Spring. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. Staff.]

**[NES 351 Introduction to Islamic Law (also NES 651, RELST 350, HIST 372/652) @ #**

Fall. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. D. Powers.]

**NES 352 Palaces and Court Culture in the Islamic World**

Fall. 4 credits. D. F. Ruggles.

While much of Christian Europe slumbered, Islamic cities of the Mediterranean and Asia shone with the brilliance of their many royal courts, patronized by rulers determined to outdo each other in the display of wealth and achievement. In centers such as Cairo, Kairouan, Baghdad, Cordoba, Granada, Isfahan, Heart, Agra, Lahore, and Istanbul, luxurious palaces were built to express not only power of sovereignty but intellectual prowess as well, for it was a sign of prestige for a prince to attract the greatest artists, poets, scientists, and scholars to his court. The focus of this course will be the architectural and artistic setting of court life and the display of power in outward signs such as festivals, coinage, and public acts that confirmed and symbolized royal power and authority.

**[NES 639 Islamic Spain (also SPANL 699)**

Spring. 4 credits. Not offered 1998-99. R. Brann.]

**[NES 651 Introduction to Islamic Law (also NES 351, RELST 350, HIST 372/652)**

Fall. 4 credits. Limited to 25 students. Not offered 1998-99. D. Powers.]

## History

**NES 157 Introduction to Islamic Civilization I (also RELST 157) @ #**

Fall. 3 credits. D. Powers.

For description, see Near Eastern Civilization.

**[NES 239 Cultural History of the Jews of Spain (also JWST 239, COMP LIT 239, RELST 239, SPANL LIT 239) @ #**

Fall. 3 credits. Not offered 1998-99. R. Brann.]

**NES 244 Introduction to Ancient Judaism (also JWST 244 and RELST 244) @ #**

Spring. 3 credits. Enrollment limited to 140 students. G. Rendsburg.

This course focuses on the development of Judaism as a religion and as a civilization in antiquity. Particular emphasis is placed on theological development culminating in monotheism, the role of the covenant, law and society, sacrifice and prayer as modes of worship, and similar topics. Jewish civiliza-

tion is placed within the context of ancient civilizations (Canaan, Egypt, Babylon, Persia, Greece, Rome). Texts to be studied include selections from the Bible, the Apocrypha, the Dead Sea Scrolls, Josephus, and the Mishnah. All readings in English translation.

**NES 245 From Medievalism to Modernity: The History of Jews in Early Modern Europe, 1492-1789 (also JWST 253, HIST 285)**

Fall. 4 credits. V. Caron.

This course will examine the history of European Jewry during the centuries of translation for the Middle Ages to the Modern Era. It examines the extent to which traditional Jewish life began to break down during this period and thus paved the way for the emergence of modern Jewry. Topics will include: the impact of the Spanish Expulsion of 1492; religious, intellectual, and socio-economic dimensions of the Marrano dispersion, including Lurianic Kabbalah and the messianic movement of Shabbetai Zevi; the reestablishment of Jewish communities in the West; the end of the "Golden Age" of Polish Jewry and the rise of Hasidism; the changing economic and political role of the Jews in the 17th and 18th centuries; and the impact of Enlightenment.

**[NES 248 Introduction to Classical Jewish History (also RELST 248 and JWST 248) @ #**

Fall. 3 credits. Not offered 1998-99.]

**[NES 249 Introduction to Modern Jewish History (also JWST 245) #**

Spring. 3 credits. Not offered 1998-99. Staff.]

**[NES 257 Islamic History: 600-1258 (also HIST 254 and RELST 257) @ #**

Fall. 3 credits. Not offered 1998-99. D. Powers.]

**[NES 258 History of the Near East 1250-1914 (also HIST 248 and RELST 258) @ #**

Fall. 3 credits. Not offered 1998-99. L. Peirce.]

**NES 261 Ancient Seafaring (also JWST 261, ARKEO 275) @ #**

Fall. 3 credits. D. Owen.

For description, see Near Eastern Archaeology.

**NES 263 Introduction to Biblical History and Archaeology (also ARKEO 263, JWST 263, RELST 264) @ #**

Spring. 3 credits. Enrollment limited to 50 students. Staff.

For description, see NES 263 under Near Eastern Archaeology.

**NES 290 History of Zionism and the Birth of Israel (also JWST 290, HIST 267)**

Spring. 3 credits. V. Caron.

This course will examine the history of Zionism as an ideology and political movement from its origins in the 19th century to the present. Attention will be paid to situating Zionism within the context of modern Jewish, European, and Middle Eastern History. Topics will include: the ideological foundations of Zionism; the role of Theodor Herzl and the rise of political Zionism; the Balfour Declaration; the development of the Yishuv; Zionism as a cultural identity for Diaspora Jewry; the British Mandate; the Arab-Zionist encounter; Zionist responses to the Holocaust; and Zionism and contemporary Israeli society.

**[NES 294 Modern History of the Near East: Changing Politics, Society, and Ideas (also Government 358 and JWST 294) @**

Fall. 4 credits. Fulfills the college distribution requirement in history or the social sciences. Not offered 1998-99. M. Litvak.]

**NES 295 Introduction to Christian History (also JWST 295, RELST 295)**

Spring. 3 credits. K. Haines-Eitzen.

This course offers an introduction of Christianity from the apostle Paul through the 17th century, with an emphasis on the diversity of Christian traditions, beliefs, and practices. We will explore the origins of Christianity within the eastern Mediterranean world, the spread of Christianity, the development of ecclesiastical institutions, the rise and establishment of monasticism, and the various controversies that occupied the church throughout its history. The course will draw upon primary literary sources (from biblical literature to council proceedings, monastic rules, sermons, theological treatises, and biographies) as well as Christian art, inscriptions, music, and manuscripts.

**NES 350 Women and Patronage in Islam (also WOMNS 350)**

Spring. 4 credits. D. Ruggles.

The active patronization of art, architecture, literature, and charitable works by Muslim women from the 12th century to the present was a sign of their public and personal power. This course will examine the means of female empowerment, ascribing it to family ties, the birth of male heirs, education, financial independence, etc., as well as its limitations in a world where the public institutions were run by men. It will particularly examine periods of change and the rise of self-conscious feminism in the modern age.

**[NES 351 Introduction to Islamic Law (also NES 651, RELST 350, HIST 372/652) @ #**

Fall. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. D. Powers.]

**[NES 353 Politics and Culture in Late Medieval Central Asia and the Near East (also HIST 317) @ #**

Fall. 4 credits. Not offered 1998-99. L. Peirce.]

**NES 356 Islamic History: The Age of Ibn Khaldun (also HIST 317)**

Spring. 4 credits. Enrollment limited to 15 students. Prerequisite: NES 257 or equivalent. D. Powers.

An examination of the Islamic world in the age of the great fourteenth-century historian Ibn Khaldun, with special attention to the political, social, and economic history of the Maghrib, or Muslim West.

**[NES 358 Ottoman History: 1300-1600 (also HIST 446/646 and NES 658) @ #**

Fall. 4 credits. Not offered 1998-99. L. Peirce.]

**[NES 359 Ottoman History: 1600-1923 (also HIST 441/641 and NES 659) @ #**

Spring. 4 credits. Not offered 1998-99. L. Peirce.]



**NES 368-369 State, Society & Language in Ancient Egypt (also GOVT 343/345)**

368, fall; 369, spring. 4 credits.  
M. Bernal.

This course is concerned with state and society in Pharaonic Egypt 3400-300 BCE. This will be combined with an introduction to Middle Egyptian, the official language of the Middle Kingdom 2000-1750 BCE and accepted as the "classical" language thereafter. This is a two-semester sequence course. In the fall we shall study the Egyptian state and society through secondary materials; in the spring we shall be reading primary sources concerned with everyday life, official reports and adventures abroad.

**NES 390 Modern History of the Middle East: Changing Politics, Society and Ideas (also GOVT 358, JWST 390)**

Fall. 4 credits. J. Rosberg.

This introductory course is designed to acquaint students with the main political, social, and cultural trends that have shaped the modern and contemporary history of the Near East. While discussing developments in the region during the 19th and 20th centuries, the lectures will focus on such themes as modernization, nationalism, Islamic response, and Arab politics in global and regional contexts. The course does not presuppose any knowledge of Near Eastern languages.

**[NES 391 International Relations of the Ancient Near East, 3500-500 BCE (also GOVT 355)]**

Spring. 4 credits. Not offered 1998-99.  
M. Bernal.]

**[NES 393 Religion and Politics in the Middle East (also RELST 393)]**

Fall. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. M. Litvak.]

**[NES 395 International Relations of the Middle East (also GOVT 392) @]**

Fall. 4 credits. Not offered 1998-99.]

**[NES 451 Seminar in Islamic History: 600-750 (also HIST 461/671, NES 650, and RELST 451) @ #]**

Spring. 4 credit. Enrollment limited to 25 students. Prerequisite: NES 257 or 258, or permission of instructor. Not offered 1998-99. D. Powers.]

**NES 453 Islam in China and Southeast Asia (also ASIAN 422)**

Fall. 4 credits. J. Armijo-Hussein.  
For description, see Asian 422.

**NES 457 The Role of Women in Muslim Societies: Past, Present and Future (also Asian 423)**

Spring. 4 credits. J. Armijo-Hussein.  
For description, see Asian 423.

**[NES 459 Women, Men and the Law in Muslim Court (also WOMNS 458, RELST 459, HIST 457/657 and NES 655) @ #]**

Fall. 4 credits. Prerequisites: previous course in Islamic Studies helpful but not essential. Enrollment limited to 20 students. Not offered 1998-99. L. Peirce.]

**[NES 650 Seminar in Islamic History: 600-750 (also HIST 461/671, NES 451, and RELST 451) @ #]**

Spring. 4 credit. Not offered 1998-99.  
D. Powers.]

**[NES 651 Introduction to Islamic Law (also NES 351, RELST 350, HIST 372/652)]**

Fall. 4 credits. Enrollment limited to 25 students. Not offered 1998-99.  
D. Powers.]

**[NES 655 Women, Men and the Law in Muslim Court (also WOMNS 458, RELST 459, HIST 457/657 and NES 459)]**

Fall. 3 credits. Prerequisites: previous course in Islamic Studies helpful but not essential. Enrollment limited to 20 students. Not offered 1998-99. L. Peirce.]

**[NES 658 Ottoman History: 1300-1600 (also HIST 446/646 and NES 358)]**

Fall. 4 credits. Not offered 1998-99.  
L. Peirce.]

**[NES 659 Ottoman History: 1600-1923 (also HIST 441/641 and NES 359)]**

Spring. 4 credits. Not offered 1998-99.  
L. Peirce.]

**[NES 682 International Relations of the Middle East (also GOVT 682)]**

Fall. 4 credits. Graduate seminar.  
Undergrad seniors only with permission of instructor. Not offered 1998-99.  
S. Telhami.]

**Literature****[NES 213 Introduction to the Qur'an (also RELST 213) @ #]**

Spring. 3 credits. Not offered 1998-99.]

**[NES 223 Introduction to the Bible (also JWST 223 and RELST 223) @ #]**

Spring. 3 credits. Not offered 1998-99.]

**NES 227 Introduction to the Prophets (also JWST 227 and RELST 227) @ #**

Fall. 3 credits. Enrollment limited to 140 students. G. Rendsburg.

This course will introduce students to the period of Israel's history that produced the prophetic literature, ca. 1000-400 B.C.E., and to the stories and books of Israel's prophets, with specific reference to theological and literary issues. Also included in the course is a discussion of several other texts (Book of Job, Psalm 137, etc.). Even though these stories fall outside the corpus of the biblical prophets, they react to the same issues and events.

**NES 229 Introduction to the New Testament (also RELST 229 and JWST 229)**

Fall. 3 credits. K. Haines-Eitzen.

This course provides a literary and historical introduction to the earliest Christian writings, most of which eventually come to be included in the New Testament. Through the lens of the gospel narratives and earliest Christian letters, especially those of Paul, the course will explore the rich diversity of the early Christian movement, from its Jewish roots in first century Palestine through its development and spread to Asia Minor and beyond. Careful consideration will be given to the political, economic, social, cultural, and religious circumstances that gave rise to the Jesus movement, as well as those that facilitated the emergence of various manifestations of early Christian beliefs and practices.

**[NES 230 The Quest for the Historical Jesus (also RELST 231)]**

Spring. 3 credits. Not offered 1998-99.]

**NES 236 Israel: Literature and Society (also JWST 236)**

Fall. 3 credits. Y. Halevi-Wise.

A series of Israeli literary works in English translation, including novels, short stories, and poems will be read and analyzed. The course will also consider how Israeli literature reflects the clashes between ideology and reality, Eastern and Western cultures, and different sociopolitical structures in Israeli life.

**[NES 239 Cultural History of the Jews of Spain (also JWST 239, COM L 239, RELST 239, SPAN L 239) @ #]**

Fall. 3 credits. Not offered 1998-99.  
R. Brann.]

**NES 296 Gender, Sexuality, and the Body in Early Christianity (also RELST 297, WOMNS 296)**

Spring. 3 credits. K. Haines-Eitzen.

Beliefs about gender, sexuality, and the human body were remarkably interwoven with political, religious, and cultural disputes in early Christianity. In this course we will explore the construction and representation of gender, sexuality, and the body in various forms of Christianity from the first century through the fourth. Asceticism and celibacy, veiling and unveiling, cross-dressing and Gnostic androgyny, marriage and childbirth, and homosexuality will be among the topics considered, and our sources will range from the New Testament, early Christian apocrypha, martyrologies, and patristic writings to Greek medical texts, Jewish midrash, Roman inscriptions, and Egyptian erotic and magical spells. Current interdisciplinary and theoretical studies on gender, ideology, sexuality, and power will aid us in developing our analytical approaches to the ancient materials.

**NES 313 Classical Arabic Texts (also RELST 313)**

Fall. 4 credits. Prerequisite: NES 311 or equivalent. D. Powers.

This course will be an advanced study of classical Arabic through a close reading of selected chapters of the Qur'an, together with the Qur'anic commentary (tafsir) and other relevant literature. Special attention will be given to grammar, syntax, and lexicography.

**[NES 339 Muslims, Christians, and Jews in Islamic Spain: Literature and Society (also JWST 339, COM L 334, RELST 334, SPAN L 339) @ #]**

Spring. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. R. Brann.]

**[NES 356 Readings in Ottoman Turkish @ #]**

Spring. 4 credits. Prerequisite: knowledge of modern Turkish. Enrollment limited to 15 students. Not offered 1998-99. L. Peirce.]

**NES 400 Seminar in Advanced Hebrew (also JWST 400) @**

Fall and spring. 4 credits. Prerequisite: NES 302/JWST 302 or permission of instructor. Enrollment limited to 15 students. N. Scharf.

Continuation of work done in NES/JWST 302, with less emphasis on the study of grammar. We will read and discuss texts of cultural relevance, using articles published in Israeli newspapers and works by authors in each of the three principal genres: poetry, theater and novels. The course may be repeated for credit with permission of instructor.

**NES 420 Readings in Biblical Hebrew Prose (also JWST 420 and RELST 420)**

Spring. 4 credits. Prerequisite: one year of biblical or modern Hebrew. Course may be repeated for credit. G. Rendsburg.  
An advanced course in reading selected portions of the Hebrew Bible. Emphasis will be placed on the philological method, with attention to literary, historical, and comparative concerns.

**[NES 428 Medieval Hebrew Biblical Exegesis (also JWST 428, NES 624, and RELST 428)] @ #**

Fall. 4 credits. Prerequisite: permission of instructor. Enrollment limited to 20 students. Not offered 1998-99. R. Brann.]

**NES 490 Algeria Cuts: Woman and Nation (also S HUM 406 and COM L 400)**

Fall. 3 credits. Limited to 15 students. R. Khanna.  
For description, see S HUM 406.

**[NES 620 Readings in Medieval Hebrew Poetry and Prose (also JWST 620)]**

Fall and spring. 4 credits each semester. Prerequisite: permission of instructor. Not offered 1998-99. R. Brann.]

**[NES 630 Readings in Judeo-Arabic: Medieval Judeo-Arabic and Hebrew Poetics]**

Fall and spring. 4 credits. Not offered 1998-99. R. Brann.]

**[NES 639 Islamic Spain (also SPANL 699)]**

Spring. 4 credits. Enrollment limited to 25 students. Not offered 1998-99. R. Brann.]

**NES 491-492 Independent Study, Undergraduate Level**

Fall and/or spring. Variable credit. Prerequisite: permission of instructor. Staff.

**NES 499 Independent Study, Honors**

Fall and spring. Variable credit. Prerequisite: permission of instructor. Staff.

**NES 691-692 Independent Study: Graduate Level**

Fall or spring. Variable credit. Prerequisite: permission of instructor. Staff.

## The Program of Jewish Studies

The Program of Jewish Studies encompasses a broad spectrum of disciplines that includes civilization, history, language, literature, philology, archaeology and religion. The program offers students the opportunity to take a wide variety of courses in Jewish Studies whose subjects are not represented in the Department of Near Eastern Studies. Students interested in planning a program in Jewish Studies should consult with the director, Professor David I. Owen, 360 Rockefeller Hall. For complete listings and descriptions, see Program of Jewish Studies under "Special Programs and Interdisciplinary Studies."

**JWST 105-106 Elementary Modern Hebrew I and II (also NES 101-102)**

Fall, 105; spring, 106. 6 credits each term. Enrollment limited to 15 students. S. Shoer.

**JWST 201-202 Intermediate Modern Hebrew I and II (also NES 201-202)**

Fall, 201; spring, 202. 4 credits. Enrollment limited to 15 students. N. Scharf.

**JWST 227 Introduction to the Prophets (also RESLT 227, NES 227)**

Fall. 3 credits. G. Rendsburg.

**JWST 229 Introduction to the New Testament (also RELST 229, NES 229)**

Fall. 3 credits. K. Haines-Eitzen.

**JWST 236 Israel: Literature and Society (also NES 236)**

Fall. 3 credits. Y. Halevi-Wise.

**JWST 244 Introduction to Ancient Judaism (also NES 244, RELST 244)**

Spring. 3 credits. G. Rendsburg.

**JWST 253 From Medievalism to Modernity: The History of Jews in Early Modern Europe, 1492-1789 (also NES 245, HIST 285)**

Fall. 4 credits. V. Caron.

**JWST 261 Ancient Seafaring (also ARKEO 275, NES 261)**

Fall. 3 credits. D. Owen.

**JWST 263 Introduction to Biblical History & Archaeology (also NES 263, ARKEO 263, RELST 264)**

Spring. 3 credits. Staff.

**JWST 271 Yiddish Linguistics (also LING 241)**

Fall. 4 credits. M. Diesing.

**JWST 290 History of Zionism and the Birth of Israel (also NES 290, HIST 267)**

Spring. 3 credits. V. Caron.

**JWST 295 Introduction to Christian History (also NES 295, RELST 295)**

Spring. 3 credits. K. Haines-Eitzen.

**JWST 301-302 Advanced Modern Hebrew I and II (also NES 301-302)**

Fall, 301; spring, 302. 4 credits. N. Scharf.

**JWST 353 History of the Holocaust (also HIST 370)**

Fall. 4 credits. V. Caron.

**JWST 390 Modern History of the Middle East: Changing Politics, Society, and Ideas (also NES 390, GOVT 358)**

Fall. 4 credits. J. Rosberg.

**JWST 400 Seminar in Advanced Hebrew (also NES 400)**

Fall and spring. 4 credits. N. Scharf.

**JWST 420 Readings in Biblical Hebrew Prose (also NES 420, RELST 420)**

Spring. 4 credits. G. Rendsburg.

**JWST 446 History of Jews in Modern France (also HIST 417, FR LIT 413)**

Spring. 4 credits. V. Caron.

**JWST 491-492 Independent Study—Undergraduate**

Fall and spring. Variable to 6 credits. Staff.

**JWST 494 Studies in the Novel: Reading Joyce's Ulysses (also ENGL 470)**

Spring. 4 credits. D. Schwarz.

**JWST 499 Independent Study—Honors**

Fall and spring. Variable to 4 credits. Staff.

**JWST 694 Joyce's Ulysses and the Modern Tradition (also ENGL 670)**

Spring. 4 credits. D. Schwarz.

## Related Courses in Other Departments

Africana Studies  
Archaeology  
Classics  
Comparative Literature  
Economics  
English  
German Studies  
Government  
English  
History  
History of Art  
Medieval Studies  
Modern Languages and Linguistics  
Philosophy  
Religious Studies  
Romance Studies  
Russian Literature  
Society for the Humanities  
Sociology  
Women's Studies

## NEPALI

See Language Courses under Modern Languages.

## PALI

See Language Courses under Modern Languages.

## PHILOSOPHY

T. Irwin (chair), R. N. Boyd, G. Fine (Society for Humanities 1998-99), C. A. Ginet, H. Hodes, T. Irwin, K. Jones, S. MacDonald (on leave fall 1998), R. W. Miller, F. Neuhauser, S. Shoemaker, J. Stanley (on leave 1998-99), N. Sturgeon, Z. Szabó (on leave spring 1999), J. Whiting. Emeritus: N. Kretzmann

The study of philosophy provides students with an opportunity to become familiar with some of the ideas and texts in the history of thought while developing analytical skills that are valuable in practical as well as academic affairs. It affords the excitement and satisfaction that come from understanding and working toward solutions of intellectual problems. The curriculum includes offerings in the history of philosophy, logic, philosophy of science, ethics, social and political philosophy, metaphysics, and theory of knowledge. Any philosophy course numbered in the 100s or 200s is suitable for beginning study in the field. Sections of Philosophy 100 are part of the freshman writing seminar program; they are taught by various members of the staff on a variety of philosophical topics, and because of their small size (seventeen students at most) they provide ample opportunity for discussion. Students who want a broad introduction to philosophy may take Philosophy 101, but many students with special interests may find that the best introduction to philosophy is a 200-level course in some particular area of philosophy; such courses have no prerequisites and are usually open to freshmen.

## The Major

Students expecting to major in philosophy should begin their study of it in their freshman

or sophomore year. Admission to the major is granted by the director of undergraduate studies of the department on the basis of a student's work during the first two years. Normally the student must have completed two philosophy courses with grades of B or better. Eight philosophy courses are required for the major. They must include at least one course in ancient philosophy (Philosophy 210 or 211, or a course with a large component on Plato or Aristotle), at least one course in classical modern metaphysics and epistemology (Philosophy 212 or a course on the empiricists, the rationalists, or Kant), and a minimum of three courses numbered above 300. Students admitted to the major after fall 1996 will be required to take a minimum of six philosophy courses numbered above 200, and may not count more than one section of Philosophy 100 toward the major. A course in formal logic (e.g., Philosophy 231), while not required, is especially recommended for majors or prospective majors. Courses numbered 191–199 do not count toward the major.

Philosophy majors must also complete at least 8 credits of course work in related subjects approved by their major advisers. Occasionally majors may serve as teaching or research aides, working with faculty members familiar with their work.

**Honors.** A candidate for honors in philosophy must be a philosophy major with an average of B- or better for all work in the College of Arts and Sciences and an average of B+ or better for all work in philosophy. In either or both terms of the senior year a candidate for honors enrolls in Philosophy 490 and undertakes research leading to the writing of an honors essay by the end of the final term. *Honors students normally need to take Philosophy 490 both terms of their senior year in order to write a satisfactory honors essay.* Philosophy 490 does not count toward the eight philosophy courses required for the major. Prospective candidates should apply at the philosophy department office, 218 Goldwin Smith Hall.

## Fees

In some courses there may be a small fee for photocopying materials to be handed out to students.

## Introductory Courses

These courses have no prerequisites; all are open to freshmen.

**Note:** Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.

### PHIL 100 Freshman Writing Seminars in Philosophy

Fall and spring. 3 credits. Consult the brochure listing freshman writing seminars prepared by the John S. Knight Writing Program.

### PHIL 101 Introduction to Philosophy (by petition for breadth requirement)

Fall, M W F 9:05–9:55, N. Sturgeon; spring, M W F 9:05. 3 credits. J. Whiting.

**Fall:** This course will deal with a number of the central problems of philosophy, such as the existence of God, our knowledge of the external world, the mind-body problem, free will and the foundations of morality.

**Spring:** An introduction—using both historical texts (such as Plato's Socratic dialogues and Descartes' *Meditations*) and contemporary texts (on, for example, personal identity and social construction)—to central philosophical problems and methods. Scepticism (about, for example, the existence of objective moral values, the external world, and other minds) and various ways of responding to it will play a central role. We will also focus on various questions about the nature of persons and their relations to minds, bodies, the external world and one another. For example: should we identify you with your mind or your body? (or both? or neither?) If your body is a physical entity, and so subject to physical laws, how (if at all) can you will be free? What roles, if any, do your conceptions of yourself or other people's conceptions of you—as, for example, male or female—play in determining who or what you are? Is genuinely altruistic action possible? How (if at all) can we explain irrational action?

### [PHIL 131 Logic, Evidence, and Argument

3 credits. Not offered 1998–99.]

### [PHIL 145 Contemporary Moral Issues

3 credits. Not offered 1998–99.]

### PHIL 191 Introduction to Cognitive Science (See Cognitive Studies 101)

Fall. 3 credits. T R 11:40–12:55.

M. Spivey-Knowlton.

This course surveys the study of how the mind/brain works. We will examine how intelligent information processing can arise from biological and artificial systems. The course draws primarily from five disciplines that make major contributions to cognitive science: philosophy, psychology, neuroscience, linguistics, and computer science. The first part of the course will introduce the roles played by these disciplines in cognitive science. The second part of the course will focus on how each of these disciplines contributes to the study of five topics in cognitive science: language, vision, learning and memory, action, and artificial intelligence.

### PHIL 201 Philosophical Problems

Fall. 4 credits. M W F 10:10–11:00.

C. Ginet.

This course will discuss the following well-known puzzles: Zeno's paradoxes of motion (the Racecourse, the Arrow) and of plurality, the paradox of the heap, the paradox of the surprise examination, the prisoner's dilemma, Newcomb's problem, and the paradox of the liar. These puzzles present us with reasoning that is paradoxical in the sense that, although it seems clear that there must be something wrong with the reasoning, it is not easy to see what it is. Studying such puzzles is not only an intriguing exercise in itself but can show us interesting things about such basic concepts as those of space, time, motion, truth, knowledge, rational choice, and causation.

### [PHIL 210 Ancient Thought #

4 credits. Not offered 1998–99.]

### PHIL 211 Ancient Philosophy (also Classics 231) #

Fall. 4 credits. T R 11:40–12:55.

C. Brittain.

This course examines the origin and development of Western philosophy in Ancient Greece and Rome. We will study some of the central ideas of the Pre-Socratics, Socrates, Plato, Aristotle, and the Hellenistic philoso-

phers (Epicureans, Stoics, and Sceptics). Questions to be considered include: What are the nature and limits of knowledge? How reliable is perception? What are the basic entities in the universe: atoms, Platonic Forms or Aristotelian substances? Is moral knowledge possible? What is the nature of happiness and what sort of life will make people happy? Do human beings have free will? This course has no prerequisites.

### PHIL 212 Modern Philosophy #

Spring. 4 credits. M W F 1:25–2:15.

T. Irwin.

This course is an introduction to early modern philosophy (roughly, the period between 1640 and 1790). We will read and interpret five complete works which played a central role in the development of philosophical thought during this time. These works are: Descartes's *Meditations*, Berkeley's *Principles*, Leibniz's *Monadology*, Hume's *Enquiry*, and Kant's *Prolegomena*. We will focus on questions concerning the nature, justification, and limits of human knowledge.

The aim of the course is twofold. First, we will analyze and evaluate the arguments these philosophers offer in support of their respective positions. This will make it possible to understand what philosophical problems are, and how philosophical debates might illuminate them. Second, in exploring the arguments we will also learn about interpretation, about ways of approaching texts that were written centuries ago. This will help to see what changes and what remains the same in our understanding of philosophical problems.

### [PHIL 213 Existentialism and Literature (also Comparative Literature 213)

4 credits. Not offered 1998–99.]

### [PHIL 214 Philosophical Issues in Christian Thought #

4 credits. Not offered 1998–99.]

### PHIL 231 Introduction to Deductive Logic

Fall. 4 credits. M W F 1:25–2:15.

H. Hodes.

The logic of truth-functional connectives and the universal and existential quantifiers: analysis of English-statements in terms of a formal language; evaluation of deductive reasoning in terms of such an analysis.

### PHIL 241 Ethics (by petition for breadth requirement)

Fall. 4 credits. T R 2:55–4:10. R. Miller.

Introduction to the philosophical study of major moral questions—for example: Are all values relative, or are there some objective moral values? Have we ever any good reason to care about the interests of other people? What sacrifices are required by our moral duties? What is the nature and basis of our moral duties? Do people have rights with which governments should not interfere, even to advance the general welfare? What inequalities are unjust? The course discusses general issues in moral philosophy, together with some of their implications for particular current moral controversies, such as the debates over abortion, reverse discrimination, and policies reducing economic inequality. Readings from major philosophers of the past, as well as contemporary sources.

**PHIL 242 Social and Political Philosophy (also Government 260)**

Fall. 4 credits. T R 1:25-2:40.

F. Neuhauser.

An introduction to the foundational texts of modern political theory, including Hobbes, Locke, Rousseau, and Rawls. Topics include the source of political legitimacy, why individuals are obligated to obey just laws, the limits of legitimate political authority, and the nature of human freedom. Special attention will be paid to the justificatory role the social contract plays in political philosophy.

**[PHIL 243 Aesthetics]**

4 credits. Not offered 1998-99.]

**[PHIL 244 Philosophy and Literature]**

4 credits. Not offered 1998-99.]

**PHIL 245 Ethics and Health Care**

Fall. 4 credits. T R 11:40-12:55. K. Jones. This course is an introduction to the ethical issues associated with contemporary medicine. No previous study of philosophy is presupposed. The course will have two lectures and one discussion section per week. Topics to be covered include: (1) The professional-patient relationship (including informed consent, medical confidentiality, medical paternalism, and trust). (2) Contemporary problems such as abortion and euthanasia. Beginning from these practical moral problems we will be led to investigate concepts such as illness, death, autonomy, quality of life and personhood. (3) Health care in a just society. We will consider competing conceptions of justice and arguments for entitlement to health care.

Does justice require that all have access to basic health care? Does it require that all have access to approximately the same level of health care? What are the implications for access to health care resources by the requirement that we not discriminate on the basis of race or gender? In the course of investigating these topics, there will emerge questions about what ethics is, and whether or not ethical judgments can be objective. Thus, in addition to learning how to arrive at and defend ethical positions, we will reflect on the techniques and methods we use.

**PHIL 246 Ethics and the World Environment**

Spring. 4 credits. M W F 11:15-12:05. N. Sturgeon.

Critical philosophical analysis of the conceptual frameworks in which policies affecting the environment are formulated and judged. Topics include the nature of ethics and the possibility of knowledge in ethics; the nature and extent of individual and social obligations to distant people, future generations, non-human animals and non-sentient things (e.g., the ecosystem); the origin of environmental problems and the range of options for their solution.

**[PHIL 247 Ethics and Public Life]**

4 credits. Not offered 1998-99.]

**[PHIL 249 Feminism and Philosophy]**

4 credits. Not offered 1998-99.]

**[PHIL 261 Knowledge and Reality]**

4 credits. Not offered 1998-99.]

**[PHIL 262 Philosophy of Mind]**

4 credits. Not offered 1998-99.]

**PHIL 263 Religion and Reason**

Spring. 4 credits. T R 10:10-11:25.

S. MacDonald.

What must (or could) God be like, and what reasons do we have for thinking that a being of that sort actually exists? What difference would (or could) the existence of God make to our lives? Religion and Reason examines the idea, common to several major world religions, that God must be an absolutely perfect being. What attributes must a perfect being have? Must it have a mind, be a person, care for human beings? Is the concept of a perfect being coherent? Is the existence of a perfect being compatible with the presence of evil in the world and the existence of human freedom? Does human morality depend in any important way on the nature or will of a perfect being? Is a perfect being among the things that actually inhabit our universe? The course approaches these questions with the tools and methods of philosophical reason and through readings drawn from both classic texts and contemporary philosophical discussion.

**[PHIL 270 Truth and Interpretation (also Linguistics 270/Cognitive Studies 270)]**

4 credits. Not offered 1998-99.]

**PHIL 286 Science and Human Nature (also Science and Technology Studies 286)**

Spring. 4 credits. M W F 11:15-12:05.

R. Boyd.

**Topic for 1998-99:** Darwin, Social Darwinism, and Human Sociobiology. An examination of attempts in the biological and social sciences to offer scientific theories of human nature and human potential and to apply such theories to explain important social and psychological phenomena.

**PHIL 294 Global Thinking (also Government 294)**

Spring. 4 credits. No prerequisites; intended for freshmen and sophomores. T R 1:25-2:40, plus disc. Satisfies geographical distribution requirement. H. Shue.

The analysis taught in this course is global in two different respects: international subjects and interdisciplinary methods. We look in detail at questions raised by one of the most important and most difficult issues facing international society: when, if ever, should other nations unilaterally or multilaterally intervene militarily into ethnic conflicts like those in Bosnia and Rwanda in this decade? Both of these recent cases, one in Europe and one in Africa, raise fundamental questions about the kind of world we are constructing for the 21st century.

To what extent is the system of nation-states we now have either desirable or unavoidable? Does every ethnic group have a right to a self-determining and sovereign state? When is the use of military force morally justified? Should trials for war crimes or crimes against humanity be routinely held after military conflicts? These and other ethical questions need to be answered in light of the best available knowledge about the political dynamics of foreign intervention and the changing international legal regime, bringing together political science, law, and ethics. The course is team-taught by leading faculty researchers from the three fields involved.

**Intermediate or Advanced Courses**

Some of these courses have prerequisites.

**PHIL 309 The Philosophy of Plato #**

Spring. 4 credits. T R 8:40-9:55.

L. Ruetsche.

**[PHIL 310 Aristotle #]**

Not offered 1998-99.]

**PHIL 311 Modern Rationalism #**

Fall. 4 credits. T R 1:25-2:40. Z. Szabo.

Rationalism is the philosophical doctrine that reason itself can be the ground for knowledge; it is opposed to empiricism which claims that all our knowledge must be grounded in experience. This course is an examination of philosophical systems of rationalist bent from the 17th and 18th centuries. Readings will include Descartes's *Meditations*, a large part of the *Objections and Replies to the Meditations*, Spinoza's *Ethics*, and a few of Leibniz's smaller writings. The main focus of the course will be metaphysical: we will mainly discuss questions about substance, identity, and universals.

**PHIL 312 Modern Empiricism #**

Spring. 4 credits. M W F 9:05-9:55.

N. Sturgeon.

The major philosophical works of Locke, Berkeley, and Hume. Topics include knowledge and skepticism; thought and meaning; substance and causation, the interpretation of physical science; God; the role of philosophy.

**[PHIL 314 Ancient Philosophy: The World of Theory and the World of Ordinary Life #]**

4 credits. Not offered 1998-99.]

**[PHIL 315 Medieval Philosophy #]**

4 credits. Not offered 1998-99.]

**PHIL 316 Kant**

Fall. 4 credits. T R 10:10-11:25.

F. Neuhauser.

An introduction to Kant's main metaphysical and epistemological doctrines as presented in the *Critique of Pure Reason*, including: the nature of space and time, the justification of scientific knowledge, the nature of human reason and self-consciousness. Special attention will be paid to Kant's critique of traditional metaphysics and his attempt to establish a new metaphysics, grounded in practical reason, that establishes the existence of God, human freedom, and morality.

**[PHIL 317 Hegel #]**

4 credits. Not offered 1998-99.]

**[PHIL 318 Twentieth-Century Philosophy]**

Not offered 1998-99.]

**[PHIL 319 Philosophy of Marx #]**

4 credits. Not offered 1998-99.]

**PHIL 331 Deductive Logic (also Mathematics 281)**

Fall. 4 credits. M W F 2:30-3:20.

H. Hodes.

Review of derivations and truth-in-a-model; function-constants and identity; truth in non-fully-distinguished models; very basic set-theory; sets as the only mathematical objects; mathematical induction; soundness; completeness. Recommended previous course: Philosophy 231 or equivalent.



**Phil 332 Philosophy of Language**

Spring. 4 credits. M W F 1:25-2:15.  
H. Hodes.

Introduction to philosophical issues concerning language, including issues about many of the following: meaning, reference, logical form, indexicality, linguistic understanding, speech-acts, propositional attitudes, figurative usage.

**PHIL 341 Ethical Theory**

Spring. 4 credits. M W 2:55-4:10.  
K. Jones.

Theme for 1999: Feminist Ethics. Like much of contemporary feminist theory, feminist ethics began with the assumption that ethical theory was fully adequate to address feminist concerns. All that needed to be done was to take the resources of ethical theory and apply them to hitherto overlooked questions, such as abortion, affirmative action, justice in the family, and pornography. This project assumes, however, that the theories themselves are adequate to theorize the ethical dimensions of women's experience. This claim has been challenged. In particular, it has been argued that traditional ethical theory overlooks the situatedness of agents and devalues emotions and relations to particular others. We will critically examine these claims and their challenge to ethical theories that take the principle moral concept to be the concept of "duty." In addition, we will examine the view, argued for by Carol Gilligan, that women speak with a distinctive ethical voice—a voice of care, rather than of justice. Gilligan's work raises the problem of what feminist ethics is: any move from "feminine" to "feminist" must be treated with great suspicion. It turns out that a wide variety of projects are currently being pursued under the general heading of feminist ethics and we will explore some of the differences in feminist approaches to ethics as well as their commonalities.

**[PHIL 342 Law, Society, and Morality (also Law 666)]**

4 credits. Not offered 1998-99.]

**[PHIL 343 Resistance and Responsibility (also Law 676)]**

4 credits. Not offered 1998-99.]

**PHIL 344 History of Ethics: Ancient and Medieval #**

Fall. 4 credits. No prerequisites. M W F 1:25-2:15. T. H. Irwin.

The development of moral theory in Greek, Roman, and medieval philosophers. Topics include: Socrates and his questions about morality; the different answers of Plato, Aristotle, and the Stoics; and the influence of Christian thought. Main questions: happiness, welfare, and the human good; the virtues; self-interest and the interests of others; love, friendship and morality; theories of human nature and their relevance to ethics; comparisons and contrasts with modern moral theory. Readings mainly from Plato, Aristotle, the Stoics, St. Paul, St. Augustine, St. Thomas Aquinas.

**PHIL 345 History of Ethics: Modern #**

Spring. 4 credits. M W F 2:30-3:20.  
T. H. Irwin.

A continuation of Philosophy 344. Hobbes's challenge to Greek and Christian ethics, responses to Hobbes, self-interest and the interests of others, the place of reason and sentiment in ethics, the objectivity of ethics, different conceptions of the right and the

good, utilitarianism and its critics, and radical critiques of morality. Readings mainly from Hobbes, Butler, Hume, Kant, Sidgwick, Nietzsche, Bradley, and Rawls.

**PHIL 346 Modern Political Philosophy (also Government 462)**

Fall. 4 credits. M W 2:55-4:10. R. Miller.  
A study of the leading contemporary theories of justice, including the work of Rawls, Nozick, Gauthier and Scanlon. We will discuss rival views of the moral significance of economic inequality, the kinds of freedom that governments ought to protect, the kinds of values and convictions that are a proper basis for laws (as opposed to being private matters), the tension between unequal political influence and democratic rights, and the roles of community, virtue and group-loyalty in political justification. We will largely be concerned with the conceptions of freedom, equality, obligation and community underlying competing theories. We will also consider implications for specific political controversies, e.g., over abortion, welfare programs and pornography.

**PHIL 361 Metaphysics and Epistemology**

Spring. T R 11:40-12:55. S. Shoemaker.  
Color and color experience. The course will be concerned with the ontological status of "secondary qualities," especially colors, and the nature of our perceptual experience of them.

**[PHIL 362 Philosophy of Mind]**

4 credits. Not offered 1998-99.]

**[PHIL 363 Topics in the Philosophy of Religion]**

4 credits. Not offered 1998-99.]

**[PHIL 368 Global Climate and Global Justice (also Government 368)]**

4 credits. Not offered 1998-99.]

**PHIL 369 Limiting War (also Government 469)**

Spring. 4 credits. T R 2:55-4:10. H. Shue.  
An examination of ethical issues underlying choices about national and international security, concentrating on decisions about possession and use of specific types of weapons: weapons of mass destruction (nuclear, chemical, and biological), precision-guided missiles, and landmines. Should nuclear weapons be used to deter chemical and biological weapons, or does non-proliferation of the latter require abolition of the former? Can the distinction between combatants and non-combatants be maintained in an era of high-tech warfare? What, if anything, is special about landmines?!

**PHIL 381 Philosophy of Science: Knowledge and Objectivity (also Science and Technology Studies 381)**

Fall. 4 credits. W 7:30-10:00 p.m.  
R. Boyd.

An examination of central epistemological and metaphysical issues raised by scientific theorizing: the nature of evidence; scientific objectivity; the nature of theories, models, and paradigms; and the character of scientific revolutions.

**[PHIL 382 Philosophy and Psychology]**

4 credits. Not offered 1998-99.]

**[PHIL 383 Choice, Chance and Reason]**

4 credits. Not offered 1998-99.]

**[PHIL 384 Philosophy of Physics]**

4 credits. Not offered 1998-99.]

**[PHIL 387 Philosophy of Mathematics]**

4 credits. Not offered 1998-99.]

**[PHIL 389 Philosophy of Science: Evidence and Explanation]**

4 credits. Not offered 1998-99.]

**PHIL 390 Informal Study**

Fall or spring. Credit to be arranged.  
To be taken only in exceptional circumstances. Must be arranged by the student with his or her adviser and the faculty member who has agreed to direct the study.

**Advanced Courses and Seminars**

These courses are offered primarily for majors and graduate students.

**[PHIL 395 Majors Seminar]**

4 credits. Not offered 1998-99.]

**[PHIL 409 German Philosophical Texts]**

Not offered 1998-99.]

**PHIL 410 Latin Philosophical Texts #**

Spring. Variable credit. Prerequisites: knowledge of Latin and permission of instructor. Hours to be arranged.  
S. MacDonald.

Reading of philosophical texts in the original Latin.

**PHIL 411 Greek Philosophical Texts (also Classics 311) #**

Fall and spring. Variable credit. Prerequisites: knowledge of Greek and permission of instructor. Hours to be arranged.  
T. Irwin, C. Brittain.

Reading of philosophical texts in the original Greek.

**[PHIL 412 Medieval Philosophy #]**

Not offered 1998-99.]

**[PHIL 413 Aristotle's Theory of Substance: Beings and Living Beings #]**

4 credits. Not offered 1998-99.]

**[PHIL 414 German Philosophy after Kant #]**

Not offered 1998-99.]

**PHIL 415 Special Topics in the History of Philosophy (also Society For the Humanities 405)**

Fall and spring. 4 credits. T 2:30-4:25.  
G. Fine.

**Fall:** Appearances often appear to conflict: the wind appears cold to me, but not to you; honey appears sweet to some people, but not to others; abortion seems right to some people, but not to others. What if anything should we infer? Some philosophers favor a relativist solution, according to which all appearances are correct (to those who have them) without contradiction. Others favor a sceptical solution: we can't, or don't, know which if any of the appearances are correct. Yet others argue that both appearances are false: the wind, for example, is neither warm nor cold: either properties like coldness and warmth don't exist at all or, if they do, they are subjective features of perceivers rather than objective features of the wind. We will focus on the solutions to the Problem of Conflicting Appearances offered by various ancient philosophers such as Heraclitus, Protagoras and Democritus; Plato and Aristotle; and the Hellenistic philosophers

(Epicureans, Stoics, and Sceptics). Insofar as time permits, we will also compare their solutions with more recent ones. For example, how does Protagoras' alleged relativism compare with contemporary versions of relativism? How does Epicurus' claim that all perceptions are true compare with Berkeley's seemingly similar claims?

**Spring:** Ancient and modern scepticism are often thought to be quite different from one another. Hegel, for example, argues that ancient scepticism is more radical and profound than Cartesian and post-Cartesian scepticism. Many contemporary philosophers, on the other hand, think that modern scepticism is more radical than ancient scepticism. Descartes, by contrast, denies that 'his' scepticism is novel at all. In his view, it is 'reheated cabbage', boringly familiar. Who is right? We will focus on ancient scepticism, especially as it is described by Sextus Empiricus. But we will also compare his account of scepticism with Descartes'. Insofar as time permits, we will also look at some of the following: Montaigne, Gassendi, and Hume; and more recent philosophers such as G.E. Moore and Barry Stroud.

**[PHIL 416 Modern Philosophy #**  
Not offered 1998-99.]

**[PHIL 431 Mathematical Logic (also Mathematics 481)**  
4 credits. Not offered 1998-99.]

**PHIL 432 Topics in Logic (also Math 482)**  
Spring. 4 credits. Prerequisites: one logic course either from the Mathematics Department or from the Philosophy Department at least at the 300-level, or permission of the instructor. M W F 2:30-3:20. H. Hodes.

Topic for Spring 1999: Logic from an abstract viewpoint.

**[PHIL 433 Philosophy of Logic**  
4 credits. Not offered 1998-99.]

**[PHIL 436 Intensional Logic (also Math 486)**  
4 credits. Not offered 1998-99.]

**[PHIL 437 Topics in the Philosophy of Language**  
4 credits. Not offered 1998-99.]

**PHIL 441 Contemporary Ethical Theory**  
Fall. 4 credits. M W F 11:15-12:05.  
N. Sturgeon.

Topic for fall: Moral Realism and its Critics.

**PHIL 442 Ethics and Value Theory (also Society for Humanities 422)**  
Spring. 4 credits. M 2:30-4:25 pm.  
C. Williams.

We will philosophically explore the imagination, with particular attention to the notion of a point of view: what is involved in occupying a point of view, the extent to which we can imaginatively transcend our own (and the ways in which there may be limits to our success), and the role of imaginative exercise in aesthetic and moral experience. Our picture of imagination will stress the "virtual" moment of the imaginer, and partly contrasts with the traditional identification of imagining with image-making.

**[PHIL 444 Contemporary Legal Theory (also Law 710)**  
4 credits. Not offered 1998-99.]

**PHIL 446 Topics in Social and Political Philosophy (also Government 474)**

Spring. 4 credits. T R 2:55-4:10. R. Miller.  
Topic for 1999: Community, Nation and Morality. Although the moral point of view is often taken to transcend ties to particular groups, actual political choices often express the choosers' ties to a nationality, state, community, religion or racial or ethnic group. To what extent are such choices morally legitimate? Do such choices, expressing particular loyalties, conflict with universalist moral principles, e.g., principles requiring equal respect for all? Our discussions will include such topics as: the role of community in liberalism and in critiques of liberal individualism; nationality and political community and their roles in individual identity, moral obligation and justice; multiculturalism, separatism, and group rights, including issues of race, gender and sexuality; the moral status of patriotism; justice and international inequality; the impact on individuals and minority groups of collective goals and shared convictions of the majority. Readings will include work by Taylor, Kymlicka, Waldron, David Miller, MacIntyre, Nagel, Guinier, Walzer and Nussbaum. The course will have a seminar format. It is intended for both advanced undergraduates and graduate students.

**PHIL 460 Metaphysics and Epistemology (also Society for the Humanities 444)**

Fall. 4 credits. M 2:30-4:30. K. Balog.  
In this seminar we will investigate a number of topics in contemporary metaphysics. The topics are the nature of metaphysical necessity, possible worlds, physicalism and dualism, scientific laws, personal identity, and free will. We will use the notion of a possible world to formulate a widely held doctrine, Physicalism, according to which everything that exists is what it is in virtue of the kinds of facts investigated by physics. We will examine whether physicalism is compatible with the existence of consciousness, personal identity, and free will.

**[Philosophy 461 Feminist Epistemology (also Women's Studies 461)**  
4 credits. Not offered 1998-99.]

**PHIL 462 Philosophy of Mind**

Fall, T R 2:55-4:10, S. Shoemaker; spring, W 4:30-6:30, K. Balog. 4 credits.

**Fall:** Personal Identity. We will examine both a prominent version of the "psychological approach" to personal identity, that of Derek Parfit, and the recent challenge to this approach by advocates of the "biological approach" (the "animalist" view).

**Spring:** In this seminar we focus on the nature and concept of consciousness, and its place in physical reality. We will be discussing some anti-physicalist arguments, according to which consciousness cannot be, or be realized by, physical states, and the physicalist rebuttals to these arguments. We will also be surveying physicalist theories of consciousness, and the relationship between consciousness and intentionality. (Also Society for the Humanities 495.)

**PHIL 481 Problems in the Philosophy of Science**

Spring. 4 credits. T R 2:55-4:10.  
L. Ruetsche.

The theories of twentieth-century physics—relativity (both special and general) and quantum mechanics—have enjoyed startling

empirical success. They have provoked philosophical commentary equally startling. Some have argued that the special theory of relativity shows our universe to be changeless and tenseless; others have urged that quantum mechanics makes possible *experimental* metaphysics, or reveals *logic* to be empirical. This course will serve as an introduction to these and other philosophical issues raised by and for twentieth-century physical theories.

Intended audience: advanced undergraduates and graduate students wishing an introduction to the philosophy of physics. No coursework in physics will be presupposed. Rather, relevant physical/mathematical notions—these being those necessary to pose and engage philosophical questions—will be introduced as needed. These notions should be accessible to anyone open-minded about the utility of formalisms and acquainted with basic high school geometry (e.g., the Pythagorean theorem).

**PHIL 490 Special Studies in Philosophy**

Fall and spring. 4 credits. Open only to honors students in their senior year. See Honors description at front of Philosophy section.

**PHIL 611 Ancient Philosophy**  
4 credits. Not offered 1998-99.]

**[PHIL 612 Medieval Philosophy**  
Not offered 1998-99.]

**[PHIL 613 Modern Philosophers**  
4 credits. Not offered 1998-99.]

**PHIL 619 History of Philosophy**  
4 credits. Spring. T 4:30-6:30.  
F. Neuhauser.

Rousseau: A systematic examination of Rousseau's views on freedom, alienation, self-love, justice, and the social constitution of rationality as presented in his three main texts: *Discourse on the Origin of Inequality*, *The Social Contract*, and *Emile*. No prior knowledge of Rousseau is assumed.

**[PHIL 633 Philosophy of Language**  
4 credits. Not offered 1998-99.]

**[PHIL 641 Ethics and Value Theory**  
4 credits. Not offered 1998-99.]

**[PHIL 661 Theory of Knowledge**  
4 credits. Not offered 1998-99.]

**PHIL 662 Philosophy of Mind**

Fall, R 4:30-6:30 p.m., K. Jones; spring, M 4:30-6:30 p.m., J. Whiting. 4 credits.

**Fall:** Topic: The Emotions. We begin by examining various answers to two interconnected questions, "What is an emotion?" and "When, if ever, is an emotion justified?". Contemporary accounts of the nature of emotions can be seen as reacting to the view that emotions are mere feelings. Rejecting this view might lead one first to judgmentalism, or the view that emotions essentially involve evaluative beliefs. However, judgmentalism is vulnerable to apparent counter-examples and most contemporary accounts can be seen as a search for alternative ways of specifying the cognitive content of emotions.

Our initial investigation into the nature of emotions will enable us to address more specific topics in the philosophy of emotions. Topics will be chosen from the following list: the role of self-interpretation in emotion, the claim that emotions are socially constructed, the role of emotions in ethical perception,

emotions and literature, emotions of self-assessment (such as pride, shame, and guilt), and particular emotions such as anger, bitterness, and jealousy.

**Spring:** Topic: Morality, Self, and Psychopathology. Philosophical accounts of personal identity typically aspire to a kind of universality; each account tends to represent itself as *the* (presumably uniquely) correct account implying the falsity of its various rivals (e.g., psychological continuity theories implying the falsity of bodily continuity theories and vice versa). But to the extent that we are dealing with *selves*—i.e., partially reflexive entities—it seems possible that different self-conceptions might yield different sorts of *selves*, some, for example, more, and some less, bodily (or psychological) than others. We will examine this sort of “contingency of selfhood” both cross-culturally (looking, e.g., at non-Western conceptions of self and at the Buddhist ideal of self-dissolution) and psychopathologically (looking, e.g., at pathological configurations of self such as those involved in autism, schizophrenia, multiple-personality-disorder, and eating disorders), treating the study of psychopathology as akin (for our purposes) to ethnography. The idea is to see whether forms of selfhood (or subjectivity) that we take for granted and perhaps even view as inescapable are in fact contingent and optional. We can then ask what sorts of selfhood (or subjectivity) it is *valuable* (morally, aesthetically, or otherwise) to cultivate. This raises the difficult question of the point(s) of view from which we are to make such assessments.

**[PHIL 663 Philosophy of Religion]**  
4 credits. Not offered 1998–99.]

#### **PHIL 664 Metaphysics**

Fall, T 7:30–9:30 p.m., Z. Szabo; spring,  
R 4:30–6:30 p.m., C. Ginot. 4 credits.

**Fall:** topic: abstract entities. We will discuss recent and not so recent controversies about (i) the distinction between abstract and concrete entities, (ii) ways of categorizing abstracta, and (iii) reasons for affirming or denying the existence of abstracta of different types. Such debates are often conducted independently of each other within different areas of philosophy; we will try to bring some of the isolated conclusions together. **Spring:** The Philosophy of Action.

#### **[PHIL 665 Metaphysics]**

4 credits. Not offered 1998–99.]

#### **PHIL 681 Philosophy of Science**

Spring. 4 credits. W 7:30–10:00. R. Boyd.

#### **[PHIL 682 Philosophy of Social Science]**

4 credits. Not offered 1998–99.]

#### **PHIL 700 Informal Study**

Fall or spring. Credit to be arranged. To be taken by graduate students only in exceptional circumstances and by arrangement made by the student with his or her Special Committee and the faculty member who has agreed to direct the study.

#### **PHIL 773 Proseminar in Cognitive Studies (also Cognitive Studies 773, Linguistics 773, and Computer Science 773)**

Fall. 2 credits. Fall: R grade. For description, see COGST 773.

#### **PHIL 774 Proseminar in Cognitive Studies (also Linguistics 774)**

For description, see COGST 774.

### **Related course in other department**

German Studies 378. German Aesthetic Theory from Kant to Hegel. P. Gilgen.

## **PHYSICS**

D. B. Fitchen, chair (109 Clark Hall, 255–6016); J. T. Rogers, director of undergraduate studies (101 Clark Hall, 255–8158); J. P. Alexander, V. Ambegaokar, P. C. Argyres, N. W. Ashcroft, K. Berkelman, E. Bodenschatz, D. G. Cassel, B. Cooper, P. Drell, G. F. Dugan, V. Elser, E. E. Flanagan, C. P. Franck, R. S. Galik, L. K. Gibbons, B. Gittelman, B. Greene, S. M. Gruner, L. N. Hand, D. L. Hartill, C. L. Henley, W. Ho, M. P. Kalos, A. LeClair, D. M. Lee, G. P. Lepage, N. D. Mermin, N. Mistry, H. Padamsee, J. M. Parpia, J. R. Patterson, R. O. Pohl, D. C. Ralph, J. D. Reppy, R. C. Richardson, D. L. Rubin, J. P. Sethna, A. J. Sievers, E. Siggia, P. C. Stein, R. M. Talman, M. P. Teter, S. A. Teukolsky, R. Thorne, H. Tye, M. D. Wang, T.-M. Yan

The Department of Physics offers a full range of university-level work in physics, from general education courses for nonscientists to doctoral-level independent research. Major research facilities are operated by two component organizations, the Laboratory of Atomic and Solid State Physics (LASSP) and the Laboratory of Nuclear Studies (LNS). LASSP carries out extensive research efforts in condensed-matter physics and in low-temperature physics. LNS operates a major high-energy particle physics research facility at Wilson Laboratory, the Cornell electron-positron storage ring (CESR). Theoretical work is carried out in many fields of physics, including astrophysics. There is a full schedule of weekly research-oriented seminars and colloquia. Junior and senior students will

find many opportunities for research participation and summer employment.

Introductory physics sequences are: 101–102, 207–208, and 112–213–214, or its honors version 116–217–218. In addition, there is a group of general-education courses, Physics 200 through 206, 209, 210. Physics 101–102, a self-paced autotutorial course, is designed for students who do not intend to take further physics courses and who do not have preparation in calculus. Physics 112 and 207 both require calculus (Mathematics 191 or 111), and additional mathematics is required for subsequent courses in the sequence. Physics 101–102 or 207–208 may be taken as terminal physics courses. The three-term sequence 112–213–214 or its honors version, 116–217–218, is recommended for engineers and physics majors. Physics 214 and 218 are placing an increasing emphasis on use of the computer for homework, laboratory exercises, and projects; some knowledge about computing, perhaps at the level of Computer Science 99 or 100, is desirable.

Courses beyond the introductory level that might be of interest to nonmajors include: Physics 316 (Modern Physics I); Physics 330 (Modern Experimental Optics); and Physics 360 (Electronic Circuits).

Advanced placement and credit are offered as outlined in “Advanced Placement of Freshmen,” or students may consult Professor Rogers, the director of undergraduate studies, as should students requesting transfer credit for physics courses taken at another college.

### **The Major**

The major program is constructed to accommodate students who wish to prepare for professional or graduate work in physics as well as those who wish to complete their major program in the field of physics but have other post-graduation goals.

### **Typical Physics Course Sequences (other sequences are also possible)**

| Semester     | No AP math<br>or physics | 1 year AP<br>calculus and good<br>HS physics | Outside<br>concentrators | Outside<br>concentrators<br>(alternate) |
|--------------|--------------------------|--|--------------------------|---|
| 1st – Fall   | 112                      | 116  | 112                      |   |
| 2nd – Spring | 213                      | 217  | 213                      | 112                                     |
| 3rd – Fall   | 214                      | 218  | 214                      | 213                                     |
| 4th – Spring | 316, 3x0                 | 316, 3x0                                     | 3x0                      | 214                                     |
| 5th – Fall   | 317, 327, 3x0            | 317, 327, 3x0                                | 316                      | 3x0, 316                                |
| 6th – Spring | 314/318, 443             | 318, 443                                     | 314                      | 314, 3x0                                |
| 7th – Fall   | 341, 410                 | 341, 410                                     | 317, 323                 | 317, 323                                |
| 8th – Spring | Elective(s)              | Elective(s)                                  |                          |   |

•For majors with concentrations outside physics, there will be wide variation in individual programs, arranged to best match the field of concentration.

•Crossovers between the two sequences 112–113–214 and 116–217–218 are possible, although the combinations 112–217–218 and 112–213–218, are difficult. Physics 207 may be substituted for Physics 112. Students taking 217 after 112 must coregister for 216.

•Students taking the honors sequence 116–217–218 are strongly encouraged to start with Physics 116. Exceptionally well-prepared students may be able to begin work at Cornell with Physics 217. Such students should come to the department office for advice in planning a course program.

•Physics electives include 360, 444, 454, 455, 480, 525, 553, 561, 572, the senior seminars 481–483, Astronomy 332 or 431–432, and A&EP 434.

•One semester of intermediate laboratory, listed here as 3x0, is required.

•Well-prepared sophomores wishing to take Physics 318 should consult the instructor before registering.

Students who wish to major in physics are advised to start the physics sequence in the first term of their freshman year. (Note that students who have had contact with introductory calculus may take Physics 112 with co-registration in Mathematics 191.) The major program can still be completed with a second-term start, but flexibility in future course scheduling is reduced.

Prospective majors are urged to make an early appointment at the physics office for advice in program planning. Acceptance into the major program is normally granted upon completion of a year of physics and mathematics courses at Cornell with all course grades at the B-level or higher. The department office will give advice in the matter of selecting a major faculty adviser. Details of the major course program are worked out in consultation between the student and major adviser.

### Physics Core

Common to all major programs is a requirement to complete a core of physics courses. In addition to the three-term introductory sequence (Physics 112-213-214 or Physics 116-217-218), the core includes five upper-level courses—(a) the two-course sequence in modern physics (Physics 316-317), (b) at least three semester hours of laboratory work selected from Physics 310, 330, 360, 410, Astronomy 410, (c) an intermediate course in classical mechanics, and (d) an intermediate course in electromagnetism.

Accompanying these physics courses should be work in mathematics through at least Mathematics 294 or 222. Students following the professional/graduate school channel are expected to complete at least one additional year of applicable mathematics (Applied and Engineering Physics 321-322 or Mathematics 321/420-422).

In addition to the core, each physics major must complete 15 semester hours of credit in an area of concentration which has been agreed upon by the student and major faculty adviser.

### Concentration within Physics

A student who wishes to pursue professional or graduate work in physics or a closely related field should follow a concentration, within the field of physics. For those students with a strong secondary school preparation, the sequence Physics 116-217-218 is encouraged. Students are strongly encouraged to start the sequence with Physics 116, even if they qualify for advanced placement credit for Physics 112. Core courses in mechanics and electromagnetism will normally be Physics 318 and Physics 327, respectively. The minimum 15 hours beyond the core must be composed of physics courses with numbers greater than 300 and must include the senior laboratory course Physics 410. This means a physics concentration needs a minimum of 7 credit hours of laboratory work to complete the requirements. The accompanying table shows several typical course sequences by means of which the major requirements may be completed. The primary distinction among students who may follow the different sequences is the amount and level of pre-college work in calculus and in physics. Changes in these typical patterns will be common, as agreed upon between student and major faculty adviser.

### Concentration outside Physics

The concentration will reflect the student's interest in some area related to physics. The array of courses that comprise the concentration must have internal coherence. The array will normally be worked out in conference with the major faculty adviser and must be approved by the adviser. Of the required 15 hours credit beyond the core, at least 8 credits must be in courses numbered above 300. Students have chosen to concentrate in such topics as chemical physics, astrophysics, natural sciences, history and philosophy of science, computer science, meteorology, or econometrics. A combined biology-chemistry concentration is appropriate for pre-medical students or those who wish to prepare for work in biophysics. Students interested in a career in the teaching of science should consider the Teacher Education in Science and Mathematics (TESM) program, which is administered by the Departments of Education and Mathematics and is described in detail in the College of Arts and Sciences section of this catalog. A concentration in "science education" would then typically include Education 402 and 403, both part of TSEM, and two or more courses designed to broaden the student's background in general science and mathematics.

For students with concentrations outside physics, the core requirements in mechanics and electromagnetism can be appropriately met with Physics 314 and Physics 323, respectively.

Students with an astronomy concentration who might continue in that field in graduate school should use Astronomy 410, 431, 432 as part of the concentration; they are encouraged to use Physics 318 and 327 to satisfy the core requirements in mechanics and electromagnetism.

### Foreign Language Requirement

Students interested in eventual graduate work in physics are advised to meet this College of Arts and Sciences requirement with work in French, German, or Russian.

### Honors

A student may be granted honors in physics upon the recommendation of the Physics Advisers Committee of the physics faculty. There is no particular course structure or thesis requirement for honors.

### Double Majors

Double majors including physics are possible and not at all uncommon. It should be noted, however, that if a student wishes to complete a major in physics as well as a major in one or more other subjects, any course used to satisfy a requirement of the second major may not be used also in satisfaction of any physics major requirement.

### Courses with Overlapping Content

Because the department offers several courses with overlapping content, students should select courses carefully to meet the needs of their academic programs and to ensure credit for each course they take. Listed below are groups of courses with largely similar content. In general, students may receive credit for only one of the courses in each group.

Physics 101, 112, 116, 207  
Physics 102, 208, 213, 217  
Physics 214, 218

### Course Prerequisites

Prerequisites are specified in physics course descriptions to illustrate the materials that students should have mastered. Students who wish to plan programs different from those suggested by the prerequisite ordering are urged to discuss their preparation and background with a physics adviser or with the instructor in the course. In many cases an appropriate individual program can be worked out without exact adherence to the stated prerequisites.

### Courses

Listed days and times are not definite but are unlikely to change. Days and times will not be listed for 600-level courses.

#### PHYS 101-102 General Physics

101, fall; 102, spring; 101, 102, summer 4-week or 8-week session. 4 credits each term. General introductory physics for non-physics for non-physics majors.

Prerequisites: three years of high school mathematics, including some trigonometry.

A student without high school physics should allow extra time for Physics 101.

Prerequisite for Physics 102: Physics 101 or 112 or 207. Includes less mathematical analysis than Physics 207-208 but more than Physics 200-206, 209, 210. Enrollment may be limited. Fall introductory lec, R Aug. 27 or M Aug. 31, 7:30 p.m. Spring introductory lec, M Jan. 25, 7:30 p.m. 101, D. Fitch; 102, D. Cassel.

Physics 101-102 emphasizes quantitative and conceptual understanding of the topics of introductory physics developed without use of calculus. The course is mostly self-paced in a mastery-oriented format including eight subject units and a final retention (review) unit each term. Most instruction occurs in the learning center utilizing video-taped lectures, personal tutoring by staff, assigned laboratory exercises, and computerized solutions of sample test questions. Unit testing is designed to measure mastery with a limit of three test tries taken at times of the student's choice.

Major topics for 101: kinematics, forces and dynamics, momentum, energy, fluid mechanics, waves and sound, thermal physics, kinetic theory, and thermodynamics. For 102: electricity and magnetism, optics, relativity, atomic, quantum, and nuclear physics. At the level of *Physics* by Cutnell and Johnson.

#### PHYS 103 General Physics

Summer. 4 credits. Prerequisite: three years of high school mathematics, including some trigonometry. Primarily for students majoring in the life sciences.

Lectures and discussions: M-F 10:00-11:15; laboratories M-W 2:00-5:00.

Basic principles treated quantitatively but without calculus. Kinematics; forces and fields, momentum, angular momentum and energy; thermal physics and fluid mechanics; and sound waves. Text at the level of *Physics*, 3rd edition, by Cutnell and Johnson.



**PHYS 112 Physics I: Mechanics**

Fall, spring, summer 6-week session. 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisite: coregistration in Mathematics 192 (or 194 or 112), or substantial previous contact with introductory calculus combined with coregistration in Mathematics 191 or 111. Lec, M W F 10:10–11:00 or 12:20–1:10. Two rec. and one lab/cooperative learning session each week. Evening exams. Fall, P. Krasicky; spring, R. Galik.

Mechanics of particles: kinematics, dynamics, conservation laws, central force fields, periodic motion. Mechanics of many-particle systems: center of mass, rotational mechanics of a rigid body, static equilibrium. At the level of *Physics for Scientists and Engineers*, Vol. 1, by Serway.

**PHYS 116 Physics I: Mechanics and Special Relativity**

Fall, spring. 4 credits. More analytic than Physics 112, intended for students who will be comfortable with a deeper, somewhat more abstract approach. Intended mainly but not exclusively for prospective physics majors. Prerequisites: a good secondary school physics course and familiarity with basic calculus. Corrective transfers between Physics 116 and Physics 112 (in either direction) are encouraged during the first few weeks of instruction. Lec, M W F 10:10–11:00. Fall, H. Tye; spring, R. Patterson.

A more rigorous version of Physics 112, covering similar topics at the level of *An Introduction to Mechanics*, by Kleppner and Kolenkow.

**PHYS 190 Supplemental Introductory Laboratory**

Fall, spring. 1 credit. Times by arrangement with instructor. S-U only. Enrollment limited to students who have all of the following: (i) three transfer credits for introductory physics lecture material; (ii) a degree requirement of the laboratory component of that introductory course; (iii) approval of the director of undergraduate studies; (iv) permission of the lecturer of that course at Cornell. Enrollment limited.

A Physics 190 Permission Form must be filed in 121 Clark Hall with the physics department course coordinator. Students perform the laboratory component of one of the introductory courses (Physics 112, 213, 214) to complement the lecture-related course credit acquired elsewhere. Those wishing to take the equivalent of one of these introductory courses at another institution should receive prior approval from the director of undergraduate studies.

**PHYS 200 Art, Archaeology, and Analysis (also Geology 200, Engineering 185, MS&E 285, Archaeology 285, and Art 372)**

For description, see GEOL 200.

**PHYS 201 Why the Sky Is Blue: Aspects of the Physical World**

Fall. 3 credits. Lec, T R 2:55–4:10, rec, W 2:30–3:20 or W 3:35–4:25. A. Sadoff.

This is a descriptive physics course aimed specifically at the non-science student. There is an emphasis on the ideas of modern physics where the approach is both historical and thematic. The methodology of science and the nature of evidence is emphasized. An overriding theme is the character of physical

laws as shown through the great principles of symmetry and conservation. While there are a few computational problems assigned, the purpose is to help students to understand the concepts rather than to master problem-solving techniques. At the level of *Physics for Poets* by March.

**PHYS 202 The World According to Physics—The Way Things Work**

Summer-3 week session. 3 credits.

Prerequisite: three years of high school mathematics, including some trigonometry. M–F 10:00–12:00; laboratories 2 afternoons per week to be arranged. R. Lieberman.

Intended to provide students majoring in fields outside the sciences with an appreciation for the familiar physical world surrounding them. Which falls faster, a pound of gold or a pound of feathers? What trajectory does a launched rocket follow? Why are the curves on highways banked? What actually keeps a satellite circling the earth—why doesn't it just fall down or fly away? Can you build a ship that runs off the heat found in the ocean? With an emphasis on problem solving, the course helps the student to develop skills transferable to other areas. Topics include Newton's basic laws of motion, trajectories, satellites, space travel, and the concepts of energy.

**PHYS 203 Physics of the Heavens and the Earth—A Synthesis**

Spring. 3 credits. Prerequisite: none; uses high school algebra and geometry. For nonscience majors. Lec T R 2:55–4:10; sec W 2:30–3:20 or 3:35–4:25. H. Padamsee.

This course shows how the unification of apparently distinct areas of physics leads to an explosion in the growth of our knowledge and understanding. The material is divided into three parts: the physics of motion on earth and motion in the heavens, showing how the two evolved separately, from the ideas of the ancient Greeks to the dynamics and telescopic discoveries of Galileo; the final melding of these two topics with Newton's Universal Gravitation; an exploration of this "new" physics and its impact. There is an emphasis throughout on "how do we know the laws?" These are the stories of breakthrough discoveries and brilliant insights made by fascinating people, offering at the same time a humanistic perspective.

**PHYS 204 Physics of Musical Sound**

Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec M W F 9:05–9:55; sec R or F 3:35–4:25. E. Cassel.

Many features of the production, propagation, and perception of musical sound may be understood in terms of important concepts in physics. Topics covered will include the mechanism of tone production in musical instruments, distinctions in tone quality, musical scales and tuning, some basic principles of room acoustics and reproduction of sound, and aspects of the mechanism of hearing. At the level of *The Acoustical Foundations of Music*, by T. D. Rossing.

**PHYS 205 Reasoning about Luck**

Fall. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec, M W 2:30–4:00; rec, T 2:30–3:20. L. N. Hand.

An attempt to explain how natural scientists can cope rationally with randomness. The first part of the course deals with the basic ideas of probability theory and explains why it is that in large systems likely events can become overwhelmingly likely. If we apply these ideas to gases consisting of very large numbers of molecules, an explanation of the true nature of heat follows. In this way, students are given a deep understanding of the second law of thermodynamics.

Probability enters into quantum mechanics in a more basic and somewhat mysterious way. We will spend the latter part of the course giving simple examples of the difference between classical and quantum probability. In particular, we discuss what is meant by an "entangled state" and how we know there are no hidden variables. At the level of *Reasoning About Luck: Probability and Its Uses in Physics* by Ambegaokar.

**PHYS 207–208 Fundamentals of Physics**

207, fall; 208, spring. 4 credits each term.

Prerequisites for Physics 207: high school physics plus Mathematics 111 or 191, or substantial previous contact with introductory calculus, combined with coregistration in a math course approved by instructor. Prerequisites for Physics 208: Physics 207 or 112 or 101 and at least coregistration in Mathematics 112 or 192. Physics 207–208 is a two-semester introduction to physics with emphasis on tools generally applicable in the sciences, intended for students majoring in a physical science, mathematics, or an analytically oriented biological science. Lec, M W F 9:05–9:55 or 11:15–12:05; two rec. and one lab each week. Evening exams. Fall, J. Rogers; spring, D. Fitchen.

207: Mechanics, conservation laws, waves, and topics from thermal physics, fluids, acoustics and properties of matter.

208: Electricity and magnetism, and topics from physical and geometrical optics, quantum and nuclear physics. At the level of *Fundamentals of Physics*, extended, by Halliday, Resnick, and Walker.

**PHYS 209 Relativity and Chaos**

Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec, T R 1:25–2:40; rec, M 2:30–3:20 or M 3:35–4:25. N. D. Mermin.

We will examine two revolutionary fields of classical physics, one venerable and one relatively recent: the special theory of relativity will be developed, with a view to understanding how certain simple but apparently contradictory facts about light lead to extraordinary insights into the nature of time; and the newer subject of "chaos" will be explored, with a view to seeing how extremely simple rules can lead to behavior of breathtaking complexity.

**PHYS 210 Randomness in Classical and Quantum Physics**

Fall. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec, T R 1:25–2:40; rec, M 2:30–3:20 or M 3:35–4:25. N. D. Mermin.

We will examine two areas of physics where randomness plays a central role: the classical probability theory of gamblers, and its relation to subjects from the nature of coincidence to

the direction of the flow of time; and the quantum theory, which promotes randomness from a consequence of human ignorance to a fundamental aspect of the physical world, leading to Einstein's celebrated rejection of a dice-throwing God and his more disturbing complaint about "spooky actions at a distance."

#### **PHYS 213 Physics II: Heat/Electromagnetism**

Fall, spring, (summer 6-week session). 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 112 and coregistration in the continuation of the mathematics sequence required for Physics 112. Lec, T R 9:05-9:55 or 11:15-12:05, two rec. each week and one 3-hour lab alternate weeks. Evening exams. Fall, J. Alexander; spring, P. Lepage. Temperature, heat, thermal energy, electrostatics, behavior of matter in electric fields, DC circuits, magnetic fields, Faraday's law, Maxwell's equations, electromagnetic oscillations. At the level of *Physics for Scientists and Engineers*, by Serway. Laboratory covers electrical measurements, circuits, and some aspects of heat transfer.

#### **PHYS 214 Physics III: Optics, Waves, and Particles**

Fall, spring, (summer, 6 week session). 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 213 and coregistration in the continuation of the mathematics sequence. Lec, T R 9:05-9:55 or 11:15-12:05. Two rec. each week and one 3-hour lab alternate weeks. Evening exams. Fall, J. Sethna; spring, G. Dugan. Physics of wave phenomena, electromagnetic waves, interference and diffraction effects, wave properties of particles and introduction to quantum physics. Course includes computer use in solving problems and labs. At the level of *Physics for Scientists and Engineers*, by Serway.

#### **PHYS 216 Introduction to Special Relativity**

Fall, spring, based upon preregistration. 1 credit. S-U only. Enrollment may be limited. Course will be completed within first four to six weeks of term. Coregistration in this course is a requirement for registration in Physics 217, unless the student has taken a relativity course at the level of Physics 116 or Astronomy 106. Prerequisites: Physics 112 or Physics 207 or permission of instructor. Lec, T R 8:00-8:50. Fall, R. Galik; spring, staff. Introduction to Einstein's Theory of Special Relativity: Galilean and Lorentz transformations, the concept of simultaneity, time dilation and Lorentz contraction, the relativistic transformations of velocity, momentum and energy, and relativistic invariance in the laws of physics. At the level of *An Introduction to Mechanics* by Kleppner and Kolenkow or *Space and Time in Special Relativity* by Mermin.

#### **PHYS 217 Physics II: Electricity and Magnetism (also A&EP 217)**

Fall, spring. 4 credits. Enrollment may be limited. Designed for students who have done very well in Physics 112 or 116 and in mathematics and who desire a more analytic treatment than that of Physics 213. Prospective physics majors are encouraged to select Physics 217. Prerequisites:

approval of student's adviser and permission from the instructor. A placement quiz may be given early in the semester, permitting those students who find Physics 217 too abstract or analytical to transfer into Physics 213, which they can do without difficulty at that time. Vector calculus will be taught in this course, but previous contact, especially with the operations *grad*, *div*, and *curl*, is helpful. It is assumed the student has seen Special Relativity at the level of Physics 116 or is currently enrolled in Physics 216. It is also assumed that the student has covered the material of Mathematics 192 and is coregistered in Mathematics 293 or the equivalent. Lec, M W F 10:10-11:00. Fall, R. Batterman; spring, R. Buhrman. At the level of *Electricity and Magnetism*, by Purcell (Vol. 2, Berkeley Physics Series).

#### **PHYS 218 Physics III: Waves and Thermodynamics**

Fall, spring. 4 credits. Enrollment may be limited. A more rigorous version of Physics 214. Conditions governing enrollment are similar to those of Physics 217. Lec, M W F 11:15-12:05. Fall, spring, staff.

Topics covered in recent years have included oscillators, mechanical waves, waves at interfaces, standing waves, electromagnetic waves, guided waves, scattering, interference and diffraction, geometric optics, the doppler effect, and an introduction to matter waves. Evening exams may be scheduled. At the level of *Physics of Waves* by Heald.

#### **PHYS 310 Intermediate Experimental Physics**

Spring. 3 credits. Enrollment may be limited. Prerequisite: Physics 208 or 213. Labs T R 1:25-4:25. Students select from a variety of experiments. An individual, independent approach is encouraged. Facilities of the Physics 410 lab are available for some experiments.

#### **PHYS 314 Intermediate Mechanics**

Spring. 4 credits. Prerequisites: Physics 208 or 214 (or equivalent) and Math 294 (or equivalent); Applied and Engineering Physics 322 or coregistration in Mathematics 420/421 recommended. Intended for physics majors with concentration outside of physics or astronomy; Physics 318 covers similar material at a more analytical level. Lec, M W F 10:10-11:00, rec, F 1:25-2:15. C. Franck. Includes Newtonian mechanics, Lagrange and Hamilton formulations, central forces, rigid body motion, and small oscillations. At the level of *Classical Dynamics* by Marion and Thornton.

#### **PHYS 316 Modern Physics I**

Fall, spring. 3 credits. Prerequisites: Physics 214 or 218 and coregistration in at least Mathematics 294 or equivalent. It is assumed that majors registering in Physics 316 will continue with Physics 317. Lec, M W F 9:05-9:55; rec, R 3:35-4:25. Fall, S. Teukolsky; spring, D. Rubin. Breakdown of classical concepts in microphysics; light quanta and matter waves; Schrödinger equation and solutions in 1 and 3 dimensions; hydrogen atom, exclusion principle, the periodic table. At the level of *An Introduction to Quantum Physics* by French and Taylor.

#### **PHYS 317 Modern Physics II**

Fall. 3 credits. Prerequisite: Physics 316. Lec, M W F 9:05-9:55, rec, T 2:30-3:20. P. Lepage.

Investigation of quantum phenomena; classical and quantum statistical mechanics; molecules; solid state physics; nuclear physics and radioactivity; elementary particle physics. At the level of *Quantum Physics of Atoms, Molecules, Solids, Nuclei and Particles* by Eisberg and Resnick.

#### **PHYS 318 Analytical Mechanics**

Spring. 4 credits. Prerequisites: Physics 116 or permission of instructor; Applied and Engineering Physics 321 or Mathematics 420. Intended for junior physics majors concentrating in physics or astronomy. Physics 314 covers similar material at a less demanding level. Lec, M W F 10:10-11:00; rec, F 2:30-3:20. P. Drell.

Newtonian mechanics of particles and systems of particles, including rigid bodies; oscillating systems; gravitation and planetary motion; moving coordinate systems; Euler's equations; Lagrange and Hamilton formulations; normal modes and small vibrations; introduction to chaos. At the level of *Classical Dynamics* by Marion and Thornton and *Physics 318 Lecture Notes* by Hand and Finch. Supplementary reading will be assigned.

#### **PHYS 323 Intermediate Electricity and Magnetism**

Fall. 4 credits. Prerequisites: Physics 208 or 214 (or equivalent) and Math 293/294 (or equivalent); coregistration in Applied and Engineering Physics 321 or Math 321 or 420 recommended. Intended for physics majors with concentration outside of physics or astronomy; Physics 327 covers similar material at a more analytical level. Lec, M W F 11:15-12:05, rec, F 2:30-3:20. G. F. Dugan.

Includes electro/magnetostatics, boundary value problems, dielectric and magnetic media, Maxwell's Equations, and electromagnetic waves, and sources of electromagnetic radiation.

#### **PHYS 327 Advanced Electricity and Magnetism**

Fall. 4 credits. Prerequisites: Physics 217/218 or permission of instructor; coregistration in Applied and Engineering Physics 321 or Mathematics 420. Intended for physics majors concentrating in physics or astronomy. Physics 323 covers similar material at a less demanding level. N.B.: Physics 327 assumes knowledge of the material at the level of Physics 217. Lec, M W F 11:15-12:05, rec, F 2:30-3:20. L. Gibbons.

Electro/magneto-statics-vector and scalar potentials, Laplace's Equation and boundary value problems, multipoles; radiation-solutions to Maxwell's Equations, energy-momentum of radiation; electrodynamics in media; special relativity-transformations, four vectors, particle kinematics and dynamics, relativistic electrodynamics. At the level of *Classical Electromagnetic Radiation*, by Heald and Marion.

#### **PHYS 330 Modern Experimental Optics (also A&EP 330)**

Fall. 4 credits. Enrollment limited. Prerequisite: Physics 214 or equivalent. Lec, M 2:30-3:20; Lab, T W 1:25-4:25; sec, F 3:35-4:25. A. Gaeta. A practical laboratory course in basic and modern optics. The seven projects cover a wide range of topics from geometrical optics

to classical wave properties such as interference, diffraction and polarization. Each experimental setup is equipped with standard, off-the-shelf optics and opto-mechanical components to provide the students with hands-on experience in practical laboratory techniques currently employed in physics, chemistry, biology, and engineering. The students will also be introduced to digital imaging and image processing techniques. At the level of *Modern Optics* by Guenther.

#### PHYS 341 Thermodynamics and Statistical Physics

Fall, 4 credits. Prerequisites: Physics 214 and Mathematics 294. Lec, M W F 10:10–11:00, rec, R 2:30–3:20. A. Sievers. Statistical physics, developing both thermodynamics and statistical mechanics simultaneously. Concepts of temperature, laws of thermodynamics, entropy, thermodynamic relations, free energy. Applications to phase equilibrium, multicomponent systems, chemical reactions, and thermodynamic cycles. Application of statistical mechanics to physical systems; introduction to treatment of Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics with applications. Elementary transport theory. At the level of *Fundamentals of Statistical and Thermal Physics*, by Reif, or *Introduction to Statistical Mechanics* by Betts.

#### PHYS 360 Electronic Circuits (also A&EP 363)

Fall, spring, 4 credits. Prerequisites: Physics 208 or 213 or permission of the instructor. No previous experience with electronics assumed, however, the course moves quickly through some introductory topics such as basic DC circuits. Fall term is usually less crowded. Lec, M 2:30–4:25; labs, T R or W F 1:235–4:25 (also evening labs M W 7:30–10:30 spring). Fall, E. Kirkland; spring, R. Thorne. Analyze, design, build and experimentally test circuits used in scientific and engineering instrumentation (with discrete components and integrated circuits). Analog circuits: resistors, capacitors, operational amplifiers (linear amplifiers with feedback, oscillators, comparators), filters, diodes and transistors. Digital circuits: combinatorial (gates) and sequential (flip-flops, counters, shift registers) logic. Computer interfacing introduced and used to investigate digital to analog (DAC) and analog to digital conversion (ADC) and signal averaging. At the level of *Microelectronic Circuits* by Sedra.

#### PHYS 400 Informal Advanced Laboratory

Fall, spring; (summer, 6 week session). Variable to 3 credits. (3 credits NOT variable in summer.) Prerequisites: two years of physics or permission of instructor. Lab T W 1:25–4:25. Fall, W. Ho; spring, D. Hartill. Experiments of widely varying difficulty in one or more areas, as listed under Physics 410, may be done to fill the student's special requirements.

#### PHYS 410 Advanced Experimental Physics

Fall, spring, 4 credits. Limited to seniors except by special permission. Prerequisites: Physics 214 (or 310 or 360) plus 318 and 327, or permission of instructor. Lec, M 2:30–3:20, lab T W 1:25–4:25. Fall, W. Ho; spring, D. Hartill. Selected topics in experimental concepts and techniques. About sixty different experiments

are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, nuclear physics. The student performs three to six diverse experiments, depending on difficulty, selected to meet individual needs and interests. Independent work is stressed. Lectures are on experimental techniques used in experiments in the laboratory and on current research topics.

#### PHYS 443 Introductory Quantum Mechanics

Spring, 4 credits. Prerequisites: Physics 327 or 323; and Physics 316 and Applied and Engineering Physics 321 or Mathematics 420; coregistration in Physics 314 or 318; or permission of instructor. Lec, M W F 9:05–9:55, rec, R 3:35–4:25. S. Teukolsky.

Introduction to concepts and techniques of quantum mechanics, at the level of *An Introduction to Quantum Physics*, by French and Taylor.

#### PHYS 444 Nuclear and High-Energy Particle Physics

Spring, 4 credits. Prerequisite: Physics 443 or permission of instructor. Lec, M W F 9:05–9:55, rec, F 2:30–3:20. J. Rogers. Behavior of high-energy particles and radiation; elementary particles; basic properties of accelerators and detectors; general symmetries and conservation laws. At the level of *Concepts of Particle Physics*, by Gottfried and Weisskopf.

#### PHYS 454 Introductory Solid-State Physics (also A&EP 450)

Fall, 4 credits. Prerequisite: Physics 443, A&EP 361, Chemistry 793, or permission of instructor. Lec, M W F 9:05–9:55. Computer lab: W or R 2:30–4:25. F. Wise. An introduction to modern solid-state physics, including crystal structure, lattice vibrations, electron theory of metals and semiconductors, and selected topics from magnetic properties, optical properties, superconductivity, and defects. At the level of *Introduction to Solid State Physics*, by Kittel, and *Solid State Physics*, by Ashcroft and Mermin.

#### [PHYS 455 Geometrical Concepts in Physics

Spring, 3 credits. Prerequisite: Physics 327 and at least coregistration in Physics 318 or permission of instructor. Usually offered every other spring. Lec, T R 10:10–11:25.

Geometrical methods are an essential tool in modern theoretical physics and also provide deep insights into classical physics—electrodynamics, thermodynamics, mechanics, special and general relativity. This course will introduce basic concepts from topology and differential geometry, emphasize calculational methods and illustrate their utility by drawing examples from these areas of physics. In particular, we shall cover manifolds, differential forms, vector bundles, homotopy, homology and Lie groups. At the level of *Geometrical Methods of Mathematical Physics* by Schutz.]

#### PHYS 480 Computational Physics (also Phys 680 and Astro 690)

Spring, 3 credits. S-U grades only. Prerequisites: the course assumes a good background in the standard "mathematical methods for physics," and the ability to write programs in Fortran or C. No

previous knowledge of numerical analysis is assumed. Lec, T R 10:10–11:25. Staff.

A course designed to familiarize students with numerical techniques for solving diverse problems in physics and related fields. The problems will be drawn from many different branches of physics, but the emphasis will be on common techniques of solution. Numerical techniques discussed in the course will include ordinary and partial differential equations, linear algebra and eigenvalue problems, Monte Carlo techniques, solving nonlinear equations, fast Fourier transforms, etc. In contrast to traditional numerical analysis courses, the flavor of the course will be "how-to," rather than theoretical. No theorems will be proved. Students will be expected to solve, both individually and in small teams, assigned numerical exercises. Text: *Numerical Recipes: The Art of Scientific Computing*, by Press, Teukolsky, Flannery, and Vetterling.

#### PHYS 481–489 Special Topics Seminar

Offerings are announced each term. 2 and 3 credits. Limited to senior physics majors and those who receive permission of instructor. S-U grades only.

#### PHYS 490 Independent Study in Physics

Fall or spring. Variable to 4 credits. Ordinarily limited to seniors. Prerequisite: permission required of professor who will direct proposed work. A copy of Request for Independent Study form must be filed with physics department course coordinator, 121 Clark Hall. Individual project work (reading or laboratory) in any branch of physics.

#### PHYS 500 Informal Graduate Laboratory

Fall, spring; summer. Variable to 2 credits. By permission of instructor. Experiments of widely varying difficulty in one or more areas, as listed under Physics 510, may be done to fill student's special requirements.

#### PHYS 510 Advanced Experimental Physics

Fall, spring, summer. 3 credits. Lab, T W 1:25–4:25. Fall, W. Ho; spring, D. Hartill. About sixty different experiments are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, nuclear physics. Students perform four to eight experiments selected to meet individual needs. Independent work is stressed. An optional lecture associated with Physics 410, M 2:30–4:25 is available. It includes lectures on techniques used in experiments in the advanced laboratory and on current research topics.

#### PHYS 520 Projects in Experimental Physics

Fall, spring, summer. Variable to 3 credits. To be supervised by faculty member. Students must advise department course coordinator of faculty member responsible for their project. Prerequisite: Physics 510.

Projects of modern topical interest that involve some independent development work by student. Opportunity for more initiative in experimental work than is possible in Physics 510.

**[PHYS 525 Physics of Black Holes, White Dwarfs, and Neutron Stars (also Astronomy 511)]**

Spring. 4 credits. Not offered 1998-99, next offered 1999-2000. D. Chernoff.

The formation of compact objects: neutrino and gravitational radiation from supernova collapse and neutron stars. Equilibrium configurations, equations of state, stability criteria, and mass limits. The influence of rotation and magnetic fields. Pulsar phenomena. Mass flow in binary systems; spherical and disk accretion; high-temperature radiation processes. Compact X-ray sources and X-ray bursts. Emphasis will be on the application of fundamental physical principles to compact objects. Topics in diverse areas of physics will be discussed: solid-state physics, nuclear physics, relativity, fluid dynamics, high-energy physics, etc. No astronomy or general relativity prerequisites. Text: *Physics of Black Holes, White Dwarfs, and Neutron Stars*, by Shapiro and Teukolsky.]

**PHYS 551 Classical Mechanics**

Spring. 3 credits. Prerequisite: an undergraduate course in classical mechanics at the level of books by K. Symon or J. B. Marion. Lec, T R 10:10-11:25, rec, R 1:25-2:15. L. Hand.

Lagrangian and Hamiltonian formulation of classical mechanics, using modern methods, modern applications in nonlinear dynamics. At the level of *Theoretical Mechanics of Particles and Continua*, by Fetter and Walecka.

**PHYS 553-554 General Relativity (also Astronomy 509-510)**

553, fall; 554, spring. 4 credits. Prerequisite: knowledge of special relativity at the level of Classical Mechanics, by Goldstein. Lec, T R 1:25-2:40. E. Flanagan.

Physics 553 is a systematic introduction to Einstein's theory, with emphasis on modern coordinate-free methods of computation. Topics include review of special relativity, modern differential geometry, foundations of general relativity, laws of physics in the presence of a gravitational field, experimental tests of gravitation theories. At the level of *Gravitation*, by Misner. Physics 554 is a continuation of 553 that emphasizes applications to astrophysics and cosmology. Topics include relativistic stars, gravitational collapse and black holes, gravitational waves, cosmology.

**PHYS 561 Classical Electrodynamics**

Fall. 3 credits. Lec T R 8:30-9:55. Sec M 2:30-3:20. V. Elser.

Maxwell's equations, electromagnetic potentials, electrodynamics of continuous media (selected topics), special relativity, radiation theory. At the level of *Classical Electrodynamics*, by Jackson.

**PHYS 562 Statistical Physics**

Spring. 4 credits. Primarily for graduate students. Prerequisites: a good knowledge of quantum mechanics (at the level of Merzbacher), classical mechanics (at the level of Marion), and statistical mechanics (at the level of Reif). Lec, M W F 9:05-9:55. N. Ashcroft.

Macroscopic or thermodynamic concepts including the laws of thermodynamics, thermodynamic functions, thermodynamic stability, and the thermodynamics of phase equilibria. Microscopic concepts including 1-, 2-, and N- particle quantum states; the micro-canonical, canonical and grand-canonical

distributions; Bose-Einstein, Fermi-Dirac and Boltzmann statistics; the density-matrix. The microscopic-macroscopic connection.

Applications include spin systems—the Ising and related models; strongly correlated fluids, and lattice-gases, including distribution and correlation functions, thermodynamic perturbation theory and introduction to critical phenomena and the renormalization group; dense Fermi- and Bose- systems; linear response of quantal and classical systems; transport properties and the Boltzmann equation. At the level of *Statistical Mechanics* (2nd edition) by Pathria and *Statistical Mechanics of Phase Transition* by Yeomans.

**PHYS 572 Quantum Mechanics I**

Fall. 4 credits. Lec, M W F 11:15-12:05. D. Cassel.

General principles of quantum mechanics, formulated in the language of Dirac. Systems with few degrees of freedom: hydrogen, including fine and hyperfine structure; the deuteron and neutron-proton scattering; helium. Theory of symmetries, perturbations and collisions will be developed to analyze phenomena displayed by these systems. At the level of *Modern Quantum Mechanics* by Sakurai. A knowledge of the subject at the level of Phys 443 will be assumed, but the course will be self-contained.

**PHYS 574 Quantum Mechanics II**

Spring. 4 credits. Lec, M W F 11:15-12:05. T-M Yan.

Systems with many degrees of freedom. Quantization of the electromagnetic field; interaction of light with matter. Many electron atoms. Second quantization for fermions. Quantum liquids. Scattering of complex systems. Introduction to the Dirac equation. A knowledge of the concepts and techniques covered in Phys 561 and 572 will be assumed.

**PHYS 599 Cosmology (also ASTRO 599)**

For description, see ASTRO 599.

**PHYS 635 Solid-State Physics I**

Fall. 3 credits. Prerequisites: a good undergraduate solid-state physics course, such as Physics 454. D. Ralph.

A survey of the basics of the physics of solids: crystal structure, x-ray diffraction, phonons, and electrons. Selected topics from semiconductors, magnetism, superconductivity, disordered materials, dielectric and optical properties and mesoscopic physics. At level of *Solid State Physics* by Ashcroft and Mermin.

**PHYS 636 Solid-State Physics II**

Spring. 3 credits. Prerequisite: Physics 635. J. Sethna.

A continuation of Physics 635; magnetism, superconductivity, broken symmetries, elementary excitations, and other topics in quantum condensed matter physics not covered in *Solid State Physics* by Ashcroft and Mermin, such as topological defects, superfluids, the quantum Hall effect, mesoscopic quantum transport theory, disordered systems, Anderson localization and other metal insulator transitions.

**[PHYS 645 High-Energy Particle Physics**

Fall. 3 credits. Not offered 1998-99, next offered 1999-00. Staff.

Introduction to physics of baryons, mesons, and leptons. Strong, electromagnetic, and weak interactions. Relevance of symmetry laws to particle physics. Introduction to the quark model. At level of *The Experimental Foundations of Particle Physics*, by Cahn and Goldhaber.]

**[PHYS 646 High-Energy Particle Physics**

Spring. 3 credits. Not offered 1998-99, next offered 1999-00. Staff.

Topics of current interest, such as high-energy electron and neutrino interactions, electron positron annihilation, and high-energy hadronic reactions. Lectures and reading material are at the level of *Introduction to High Energy Physics*, by Perkins.]

**Note:** Only S-U grades will be given in courses numbered 650 or above.

**PHYS 651 Relativistic Quantum Field Theory I**

Fall. 3 credits. S-U grades only. P. Argyres.

Topics to be covered include consequences of causality and Lorentz invariance, field quantization, perturbation theory, calculation of cross sections and decay rates, and an introduction to radiative corrections and renormalization with applications to electromagnetic and weak interactions.

**PHYS 652 Relativistic Quantum Field Theory II**

Spring. 3 credits. S-U grades only. H. Tye.

This course is a continuation of Physics 651 and introduces more advanced methods and concepts in quantum field theory. Topics include functional integral methods, quantization of non-abelian gauge theories, the renormalization group, dispersion relations, and spontaneous symmetry breaking. Applications to the electroweak theory and quantum chromodynamics are emphasized. At the level of *An Introduction to Quantum Field Theory* by Peskin and Schroeder.

**PHYS 653 Statistical Physics**

Fall. 3 credits. Normally taken by graduate students in their second or later years. Prerequisites: Competence in the basic principles of quantum mechanics, statistical physics at the level of Physics 562, and thermodynamics. S-U grades only. C. Henley.

Survey of topics in modern statistical physics: Dynamical statistical physics (kinetic theory, Boltzmann equation, hydrodynamics); theory of simple fluids; scaling theories and the renormalization group; phase transitions in disordered systems; pattern formation in nonlinear systems, percolation theory.

**PHYS 654 Theory of Many-Particle Systems**

Spring. 3 credits. Prerequisites: Physics 562, 574, 635, 636, and 653. S-U grades only. Staff.

Equilibrium and transport properties of microscopic systems of many particles studied at zero and finite temperatures. Formalisms such as thermodynamic Green's functions are introduced and applied to such topics as normal and superconducting Fermi systems, superfluidity, magnetism, insulating crystals.

**[PHYS 661 Advanced Topics in High Energy Particle Theory**

Fall. 3 credits. Prerequisites: Physics 652. S-U grades only. Not offered 1998-99.

This course will present advanced topics of current research interest. Subject matter will vary from year to year. Some likely topics are two-dimensional conformal field theory with applications to string theory and condensed matter physics, applications of the electroweak theory, lattice gauge theory, mathematical methods (e.g. group theory), perturbative quantum chromodynamics,



anomalies and geometry, supersymmetry, current algebra, heavy quark physics, heavy quark symmetry and phenomenological issues beyond the standard model.]

**PHYS 665 Topics in Theoretical Astrophysics**

For description, see ASTRO 699.

**PHYS 667 Theory of Stellar Structure and Evolution (also Astro 560)**

For description, see ASTRO 560.

**PHYS 670 Instrumentation Seminar**

Spring. 2 credits. S-U grades only.

J. Alexander.

Conception, design, and performance of innovative instrumentation in condensed matter and elementary particle physics.

**PHYS 680 Computational Physics (also Physics 480 and Astronomy 690)**

For description, see PHYS 480.

**PHYS 681-689 Special Topics**

Offerings are announced each term. Typical topics are group theory, analyticity in particle physics, weak interactions, superfluids, stellar evolution, surface physics, Monte Carlo methods, low-temperature physics, magnetic resonance, phase transitions, and the renormalization group.

**PHYS 690 Independent Study in Physics**

Fall or spring. Variable to 4 credits.

Students must advise department course coordinator, 121 Clark Hall, of faculty member responsible for grading their project. S-U grades only. Special graduate study in some branch of physics, either theoretical or experimental, under the direction of any professorial member of the staff.

## POLISH

See Language Courses under Modern Languages.

## PORTUGUESE

See Language Courses under Modern Languages.

## PSYCHOLOGY

D. J. Bem, S. L. Bem, U. Bronfenbrenner, J. E. Cutting, R. B. Darlington, T. J. DeVoogd, D. A. Dunning, D. J. Field, B. L. Finlay, E. J. Gibson, T. D. Gilovich, B. P. Halpern, A. M. Isen, R. E. Johnston, B. Khurana, C. L. Krumhansl, W. W. Lambert, D. A. Levitsky, J. B. Maas, C. Maxwell-Miller, U. Neisser, M. Owren, H. S. Porte, D. T. Regan, E. A. Regan, M. Spivey, B. J. Strupp

The major areas of psychology represented in the department are perceptual and cognitive psychology, biopsychology, and personality and social psychology. These areas are very broadly defined, and the courses are quite diverse. Biopsychology includes such things as animal learning, neuropsychology, interactions between hormones, other biochemical processes, and behavior. Perceptual and cognitive psychology includes such courses as cognition, perception,

memory, and psycholinguistics. Personality and social psychology is represented by courses in social psychology and personality (such as Psychology and Law, Judgment and Decision Making, and Social Construction of Gender), as well as courses in fieldwork and psychopathology. In addition to the three major areas mentioned above, the department also emphasizes the statistical and logical analysis of psychological data and problems.

### The Major

Admission to the major is usually granted to any student in good standing in the college who has passed three or more psychology courses with grades of C+ or better. Provisional admission requires two such courses. To apply to the major and receive an adviser, a major application form may be obtained from the department office (211 Uris Hall).

Requirements for the major are:

- 1) a total of 40 credits in psychology (including prerequisites), from which students majoring in psychology are expected to choose, in consultation with their advisers, a range of courses that covers the basic processes in psychology (laboratory and/or field experience is recommended); and
- 2) demonstration of proficiency in statistics before the beginning of the senior year. (See the section below on the statistics requirement.)

Normally it is expected that all undergraduate psychology majors will take at least one course in each of the following three areas of psychology:

- 1) **Perceptual and cognitive psychology**
- 2) **Biopsychology**
- 3) **Social, personality, and abnormal psychology**

The following classification of Department of Psychology offerings is intended to help students and their advisers choose courses that will ensure that such breadth is achieved.

- 1) **Perceptual and cognitive psychology:** Psychology 205, 209, 214, 215, 292, 305, 311, 316, 342, 412, 413, 414, 415, 416, 417, 418, 419, 436, 492.
- 2) **Biopsychology:** Psychology 223, 307, 322, 324, 326, 332, 361, 396, 420, 422, 424, 425, 429, 431, 492.
- 3) **Social, personality, and abnormal psychology:** Psychology 128, 265, 275, 277, 280, 281, 325, 327, 328, 402, 404, 450, 481, 489, 491.
- 4) **Other courses:** Psychology 101, 199, 347, 350, 410, 440, 441, 470, 471, 472, 473, 475, 478, 479. The major adviser determines to which group, if any, these courses may be applied.

With the permission of the adviser, courses in other departments may be accepted toward the major requirements.

### Fieldwork, independent study, and teaching.

The department requires students to observe the following limits on fieldwork, independent study, and teaching.

- 1) Undergraduates may not serve as teaching assistants for psychology courses if they are serving as teaching assistants for any other course during the same semester.

- 2) An undergraduate psychology major cannot apply more than 12 of the credits earned in independent study (including honors work) and fieldwork toward the 40 credits required by the major.

**Statistics requirement.** Proficiency in statistics can be demonstrated in any one of the several ways listed below.

- 1) Passing Psychology 350.
- 2) Passing an approved course or course sequence in statistics in some other department at Cornell. The approved list of courses and sequences may change. It has usually included Sociology 301, and the sequences Education 352 and 353, and Industrial and Labor Relations 210 and 211. Requests that a particular course be added to this list may be made to Professor Gilovich.
- 3) Passing a course or course sequence in statistics at some other college, university, or college-level summer school. The course or sequence must be equivalent to at least 6 semester credits. The description of the course from the college catalog and the title and author of the textbook used must be submitted to Professor Gilovich for approval.
- 4) Passing an exemption examination. This examination can be given at virtually any time during the academic year if the student gives notice at least one week before. Students who have completed a theoretical statistics course in a department of mathematics or engineering and who wish to demonstrate competence in applied statistics usually find this option the easiest. Students planning this option should discuss it in advance with Professor Gilovich.

**Concentration in biopsychology.** Psychology majors interested in psychology as a biological science can elect to specialize in biopsychology. Students in this concentration must meet all of the general requirements for the major in psychology and must also demonstrate a solid background in biology; the physical sciences, including at least introductory chemistry; and mathematics. Students will design with their advisers an integrated program in biopsychology built around courses on physiological, chemical, anatomical, and ecological determinants of human and nonhuman behavior offered by the Department of Psychology. Additional courses in physiology, anatomy, biochemistry, neurochemistry, neurobiology, and behavioral biology may be designated as part of the psychology major after consultation between the student and his or her biopsychology adviser.

**Concentration in personality and social psychology.** Psychology majors who wish to specialize in social psychology are expected to meet the general requirements set by their department, including statistics. To ensure a solid interdisciplinary grounding, students in the concentration will be permitted to include some major courses in sociology and related fields. Advisers will assist students in the selection of a coherent set of courses from social organization, cultural anthropology, experimental psychology, social methodology, and several aspects of personality and social psychology. Seniors in the concentration may elect advanced and graduate seminars, with the permission of the instructor.

**Undergraduate honors program.** The honors program is designed for those exceptionally able students who wish to pursue an intensive and independent program of research in psychology. Successful participation in this program serves as evidence of the student's facility in the two most important skills of an academic psychologist: the capacity to acquire and integrate a substantial body of theoretical and factual material and the ability to engage in creative research activity. All qualified students planning on a graduate education in psychology or other academic fields should consider the honors program seriously. The program offers most students the closest contact and consultation with faculty that they will receive during their time at Cornell.

The core of the honors program is a research project that the student carries out in close collaboration with a faculty member in the field of psychology. It is assumed that most students will do so while enrolled in Psychology 470 (Undergraduate Research in Psychology). A written report of the research is to be given to the chair of the honors committee (currently Professor Field) toward the end of the last semester of the student's senior year. An oral defense of the thesis is then given before a committee of three faculty members, and the student presents his or her work in a public forum. Final honors standing (summa cum laude, magna cum laude, cum laude) is indicated on the student's diploma. The T. A. Ryan Award, accompanied by a cash prize, is awarded to the student who conducts the best honors project in a given year.

A student may formally apply to the honors program at any time during the senior year provided that she or he is actively engaged in independent research. However, students must do so by the second week of November. Applications should be given to Professor Field and should be made directly by the student.

### Distribution Requirement

The distribution requirement in the social sciences is satisfied by any two courses in psychology with the exception of Psychology 223, 307, 322, 324, 326, 332, 350, 361, 396, 410, 420, 422, 424, 425, 429, 431, 440, 441, 470, 471, 472, 473, 475, 478, 479, 491, 492.

**Note:** The Department of Psychology has listed all days and times for each course that we offer. If there should be changes in the days, times, or semester that a course is offered, we will post the necessary changes throughout the department and in the supplements of the Course and Time and Course and Room Rosters. Changes are also available on the World Wide Web site, <http://comp9.psych.cornell.edu>

### Courses

#### PSYCH 101 Introduction to Psychology: The Frontiers of Psychological Inquiry

Fall. 3 credits. Students who would like to take a discussion seminar should also enroll in Psychology 103. M W F 10:10. J. B. Maas.

The study of human behavior. Topics include brain functioning and mind control, psychophysiology of sleep and dreaming, psychological testing, perception, learning,

cognition, memory, language, motivation, personality, abnormal behavior, psychotherapy, social psychology, and other aspects of applied psychology. Emphasis is on developing skills to critically evaluate claims made about human behavior.

#### PSYCH 102 Introduction to Cognitive Science (also COGST 101, COMS 101, LING 170, PHIL 191)

Fall. 3 credits. T R 11:40-12:55. M. Spivey.

This course surveys the study of how the mind/brain works. We will examine how intelligent information processing can arise from biological and artificial systems. The course draws primarily from five disciplines that make major contributions to cognitive science: philosophy, psychology, neuroscience, linguistics, and computer science. The first part of the course will introduce the roles played by these disciplines in cognitive science. The second part of the course will focus on how each of these disciplines contributes to the study of five topics in cognitive science: language, vision, learning and memory, action, and artificial intelligence.

#### PSYCH 103 Introductory Psychology Seminars

Fall. 1 credit. Limited to 300 students. Prerequisite: concurrent enrollment in Psychology 101. Hours to be arranged. 12 different time options. J. B. Maas and staff.

A weekly seminar that may be taken in addition to Psychology 101 to provide an in-depth exploration of selected areas in the field of psychology. Involves extensive discussion and a term paper related to the seminar topic. Choice of seminar topics and meeting times will be available at the second lecture of Psychology 101.

#### PSYCH 201 Cognitive Science in Context Laboratory (also COGST 201 and COM S 201)

Fall or spring. 4 credits. Prerequisite: Introduction to Cognitive Science PSYCH 102/COGST 101/COM S 101 or written permission of the instructor. Limited to 24 students. Disc and demos, M W 10:10-11:00; lab, M or W 1:25-4:25, plus additional hours to be arranged. Fall, B. Halpern and staff; spring, D. Field and staff.

For description, see Cognitive Studies 201.

#### PSYCH 205 Perception

Spring. 3 credits. Open to first-year students. Graduate students, see Psychology 605. T R 11:40-12:55. J. E. Cutting. One of four introductory courses in cognitive psychology. Basic perceptual concepts and phenomena are discussed with emphasis on stimulus variables and sensory mechanisms. All sensory modalities are considered. Visual and auditory perception are discussed in detail.

#### PSYCH 209 Developmental Psychology

Spring. 4 credits. Graduate students, see Psychology 709. T R 10:10-11:25. Staff. One of four introductory courses in cognition and perception. A comprehensive introduction to current thinking and research in developmental psychology that approaches problems primarily from a cognitive perspective. The course focuses on the development of perception, action, cognition, emotion, personality, social understanding, language, and moral reasoning.

#### PSYCH 214 Issues in Cognitive Psychology

Fall. 3 credits. Sophomore standing required. Limited to 150 students. Graduate students, see Psychology 614. M W F 11:15. B. Khurana.

Various approaches to the study of cognition will be discussed. Basic concepts in how humans process different kinds of information such as visual, auditory, and symbolic will be introduced. These concepts will then be used to explore topics such as attention and consciousness, concept formation and representation, memory processes and systems, imagery and cognitive maps, problem solving and reasoning, judgment and choice, language acquisition and comprehension, intelligence and creativity, and social cognition.

#### PSYCH 215 Psychology of Language (also LING 215)

Spring. 3 or 4 credits (4-credit option involves term paper). Graduate students, see Psychology 715. M W F 11:15. J. Sereno.

One of four introductory courses in cognitive psychology. Introduction to the psychological study of language. Covers research in spoken language comprehension and production, reading, and language acquisition.

#### Introductory courses in social and personality psychology.

Each of the following four courses (265, 275, 277, 280) provides an introduction to a major area of study within social and personality psychology. These courses are independent of one another, and none has any prerequisites. Students may take any one of the courses or any combination of them (including all four). Courses may be taken in any order or simultaneously.

#### PSYCH 216 Cognitive Psychology Lab

Fall. 1 credit. Limited to 16 students. Prerequisite: concurrent enrollment in Psychology 214. Hours to be arranged. B. Khurana.

If you've ever wondered how humans manage to represent their visual world, why telephone numbers are seven digits long, why imagery works as a mnemonic device, why certain things are better remembered than others, whether bilinguals are disadvantaged relative to monolinguals, how children acquire knowledge of the world, how people make decisions . . . this laboratory is for you! A weekly lab meeting that encourages students to discover the scientist in themselves through the study of Cognition. Much of Cognitive research takes place in the laboratory and this course allows students to become familiar with the "how-to" of such research. Students will be given six to eight basic experiments to explore and tinker with. They will be encouraged to pose "what if" questions and eventually test them. The course promotes independent thinking, problem solving in an experimental setting, proposing and testing of one's own hypotheses, relating laboratory Cognition to the real world, and communication of scientific ideas through informal and formal writing and oral assignments. Be prepared for an interactive learning experience.

**PSYCH 223 Introduction to Biopsychology**

Fall. 3 credits. M W F 10:10. No prerequisites. Can be used to satisfy the psychology major breadth requirement and as an alternative prerequisite for upper-level biopsychology courses. Students who would like to take a discussion/demonstration seminar should also enroll in Psych 224, a one hour per week one-credit section. M. J. Owren.

An introduction to psychology from a biological perspective, including both evolutionary and physiological approaches to behavior. Topics include the structure and function of the nervous system, genetic and biochemical models of behavior, hormones and behavior, biological bases of learning, cognition, communication, and language, and the ecology and evolution of social organization and social development.

**PSYCH 224 Introduction to Biopsychology Seminars**

Fall. 1 credit. Sections with a maximum of 16 students in each. Prerequisite: concurrent enrollment in Psychology 223. Days and times TBA. M. J. Owren and staff.

A weekly seminar that may be taken in addition to Psychology 223 to allow and encourage "hands-on" involvement with some of the course material, including interactive computer programs and models to get a clearer picture of basic neuroanatomy, visits to the laboratories of biopsychology faculty, films, reading, writing, and discussion of course material. Involves several small assignments equivalent to a 10-page paper.

**PSYCH 265 Psychology and Law**

Fall. 3 credits. M W F 1:25.  
D. A. Dunning.

This course examines the implications of psychological theory and methods for law and the criminal justice system. We concentrate on psychological research on legal topics (e.g., confession, eyewitness testimony, jury decision making, homicide, aggression, the prison system), social issues (e.g., death penalty, affirmative action), as well as on psychologists as participants in the legal system (e.g., assessing insanity and dangerousness and for expert testimony).

**PSYCH 275 Introduction to Personality Psychology (also HD 260)**

Spring. 3 credits. Prerequisites: Psychology 101, HDFS 115, or permission of instructor. T R 10:10–11:25. C. Hazen.

An introduction to personality psychology, with an emphasis on personality development and contemporary research. Covers the major theories of personality, influences on personality development (including genetic, biological, experiential and environmental factors), and methods for assessing personality.

**PSYCH 277 Social Construction of Gender (also Women's Studies 277)**

Fall. 3 credits. Limited to 180 students. M W F 9:05–9:55. S. L. Bem.

Psychology/Women's Studies 277 is an interdisciplinary course that addresses two broad questions: 1) how an individual's gender and sexuality are constructed; and 2) how hidden assumptions or "lenses" embedded in our social institutions, cultural discourses, and individual psyches perpetuate male power and oppress women and sexual minorities. Three lenses in particular are

emphasized: androcentrism, gender polarization, and biological essentialism. A fundamental assumption of the course is that social science has worried too much about difference per se and too little about how even our most neutral-looking institutions invisibly transform difference into disadvantage. Although some attention is given to biological perspectives, the course emphasizes the cultural and psychological processes whereby the historically contingent comes to appear as the natural. Among some of the many topics discussed are the importance of looking at biology in context, the parental "instinct," androcentrism in law, sexual orientation cross-culturally, egalitarian relationships, gender-liberated child-rearing, and homophobia.

**PSYCH 280 Introduction to Social Psychology**

Spring. 3 or 4 credits; the additional (or fourth) credit requires participation in a weekly seminar. T R 1:25–2:40.  
T. D. Gilovich and D. T. Regan.

An introduction to research and theory in social psychology. Topics include processing of social information; social influence, persuasion, and attitude change; social interaction and group phenomena. The application of social psychological knowledge to current events will also be discussed.

**PSYCH 281 The Helping Relationship**

Fall. 3 credits. Limited to 60 students.  
C. Maxwell Miller.

This course provides an introduction to the theoretical and practical aspects of some basic elements of counseling. Students will develop an understanding of the most current research on the elements of counseling and basic theoretical foundations underlying different approaches. Students will be expected to acquire and demonstrate elementary helping skills. Through role-play, observation of videos, and in-class demonstrations, students will learn such skills as attending and active listening; they will also develop a capacity to recognize internal conflicts and cognitive distortions as well as the similarities between intra-psychic and interpersonal processes. Other topics include issues of transference and counter transference, the multi-axial dimensions of the DSMIV, defensive strategies as they appear in the DSMIV and ethical considerations and practice. While this course provides an introduction to the applied aspects of psychology, it does not prepare students to provide treatment of any sort.

**PSYCH 292 Intelligence**

Spring. 4 credits. Prerequisites: one 200-level course in psychology. M W 11:15–12:05. Section meetings on Friday at 11:15, 1:25 or 2:30. U. Neisser.

A scientific overview of the controversial issues that surround intelligence tests and what they measure. Topics include the history of testing, correlates of test scores, alternative approaches to mental ability, genetic and environmental contributions to diversity in intelligence, effects of schooling, worldwide IQ gains, cultural factors and group differences.

**PSYCH 305 Visual Perception**

Fall. 4 credits. Limited to 20 students. Prerequisite: Psychology 205 or permission of instructor. M W F 11:15.  
J. E. Cutting.

A detailed examination of pictures and their comparison to the real world. Linear

perspective in Renaissance art, photography, cinema and video will be discussed in light of contemporary research in perception and cognition.

**[PSYCH 307 Chemosensory Perception**

Spring. 3 or 4 credits; the optional (or fourth) credit is for an independent research project. Graduate students, see Psychology 607. Not offered 1998–99. T R 9:05. B. P. Halpern.

The course is a survey of human chemosensory function and chemosensory perception. The Socratic Method, in which the instructor asks questions of the students, is used to cover topics such as chemosensory psychophysics, the roles of saliva in chemosensory perception, sensory, perceptual, and cognitive bases for the tastes and flavors of foods, and chemosensory function in neonates and the aged, preceded by concise examinations of relevant physiology and anatomy. Classroom discussion can increase, but not decrease, a student's final grade. Brief written statements by electronic mail of questions and problems related to each set of assigned readings are required at least one day in advance of each class meeting. Students read, analyze, and discuss in class difficult original literature dealing with the subject matter of the course. Students are expected to come to each class having already done, and thought about, the assigned readings. In addition to the assigned readings, attendance at various seminar and colloquium series sponsored by Cornell departments, programs, or graduate fields (especially Psychology, Food Science, Chemistry, Neurobiology and Behavior, Nutrition, and Biophysics), and use of resources accessible via the Internet, is often relevant to the discussion. At the level of *Tasting and Smelling*, edited by G. K. Beauchamp and L. Bartoshuk; *Sensory Science Theory and Applications in Foods*, edited by H. T. Lawless and B. Klein; *Psychological Basis of Sensory Evaluation*, edited by R. L. McBride and H. J. H. MacFie.]

**[PSYCH 311 Introduction to Human Memory**

Spring. 3 credits. Limited to 40 students. Some familiarity with statistical methods and experimental design and with the study of cognition is desirable. Graduate students, see Psychology 611. T R 11:40–12:55. Not offered 1998–99. B. Khurana.

This course offers an overview of experimental findings and theoretical issues in the study of human memory. Coverage includes topics such as the nature of memory, various memory systems, coding and retrieval processes, practice and habit acquisition, organization for learning and memory, interference and forgetting, models of memory, memory dysfunction and its relation to normal memory.]

**PSYCH 316 Auditory Perception**

Fall. 3 or 4 credits; the 4-credit option involves a laboratory project or paper. Prerequisite: Psychology 205, 209, 214, or 215 (other psychology, linguistics, or biology courses could serve as prerequisite with permission of the instructor). Limited to 30 students. Graduate students, see Psychology 716. T R 10:10–11:25.  
C. L. Krumhansl.

Basic approaches to the perception of auditory information, with special consideration of complex patterns such as speech, music, and environmental sounds.

**PSYCH 322 Hormones and Behavior (also BIONB 322)**

Spring. 3 credits. Two lectures plus a section in which students will read and discuss original papers in the field, give an oral presentation, and write a term paper. Limited to juniors and seniors. Prerequisites: Psychology 223 (previously Psych 123), or BIONB 221 or 222, or one year of introductory biology plus a course in psychology. S-U grades optional. Graduate students see Psychology 722. M W F 11:15. E. Adkins Regan.

A major focus of the course will be comparative and evolutionary approaches to the study of the relationship between reproductive hormones and sexual behavior in vertebrates, including humans. Also included will be hormonal contributions to parental behavior, aggression, stress, learning and memory, and biological rhythms.

**PSYCH 324 Biopsychology Laboratory (also BIONB 324)**

Fall. 4 credits. Limited to 20 juniors and seniors. Prerequisites: Psychology 123 or BIONB 221 or 222, and permission of instructor. T R 1:25-4:25. T. J. DeVogd.

Experiments designed to provide experience in animal behavior (including learning) and its neural and hormonal mechanisms. A variety of techniques, species, and behavior patterns are included.

**PSYCH 325 Experimental Psychopathology (also HDFS 370)**

Spring. 4 credits. Limited to sophomores, juniors, and seniors. Prerequisites: Psychology 101, HDFS 115, or Education 110; a course in statistics (e.g., Psych 350, Soc 301, Educ 352 or 353, Ag Ec 310 or equivalent). Staff.

A research-based survey of the cognitive, emotional, and biological aspects of psychopathology across the life span. The major mental illnesses will be covered, including schizophrenia, anxiety disorders, affective disorders, and personality disorders as well as psychopathological disorders of childhood. Emphasis will be placed on the development of psychopathology, current theories and models of etiology, and intervention strategies. This course is intended to be a rigorous introduction to the scientific study of psychopathology and psychopathological development; minimal attention to psychotherapy.

**PSYCH 326 Evolution of Human Behavior**

Fall. 4 credits. Prerequisite: Psychology 123, or an introductory biology course, or an introductory anthropology course. Graduate students, see Psychology 626. T R 2:55-4:10. R. E. Johnston.

A broad comparative approach to the behavior of animals and humans with special emphasis on the evolution of human behavior. Topics covered will vary but will include some of the following: human evolution, evolutionary and sociobiological theory, animal communication, nonverbal communication, language, cognitive capacities, social behavior and organization, cooperation and altruism, sexual behavior, mating and marriage systems, aggression, warfare.

**PSYCH 327 Fieldwork in the Helping Relationship**

Fall, spring. 4 credits. Prerequisites: Psychology 325, HDFS 370 or concurrent registration in 325 or HDFS 370 and permission of instructor. S-U grades only. Students do not enroll in advance for this course. Field placement assignments are made during the first two weeks of the semester. Students who have already taken Psychology 325 or HDFS 370 must contact the instructor during the first week of the semester. Enrollment is limited by the fieldwork placements available. Fee, \$25 each semester. T R 12:20-1:10. Staff.

This is a year-long lecture and discussion course. The year-long commitment is mandatory. Psychology 328 will be for students taking the course a second time. An "R" grade will be assigned in the fall semester, and a S-U grade will only be assigned in the spring semester. An introductory fieldwork course for students currently enrolled in or who have taken Psychology 325 or HDFS 370. Fieldwork placements include the school system, psychiatric institutions, halfway houses, and other mental health oriented facilities. In addition to fieldwork, weekly supervisory/seminar meetings are held to discuss fieldwork issues and assigned readings.

**PSYCH 328 Continuing Fieldwork in the Helping Relationship**

Fall, spring. 4 credits. Prerequisites: Psychology 325, 327, or HDFS 370 and permission of instructor. S-U grades only. May not be taken more than twice. Students do not enroll in advance for this course. Fee, \$25 each semester. T R 12:20-1:10. Staff.

Designed to allow students who have done fieldwork as part of Psychology 327 to continue their field placements or begin new field placements under supervision for academic credit. An "R" grade will be assigned in the fall semester, and a S-U grade will only be assigned in the spring semester.

**PSYCH 332 Biopsychology of Learning and Memory (also BIONB 328)**

Spring. 3 credits. Prerequisites: one year of biology and either a biopsychology class or BIONB 222. Limited to 60 students. Graduate students, see Psychology 632. M W F 11:15. T. J. DeVogd.

This course will survey the approaches that have been or are currently being used in order to understand the biological bases for learning and memory. Topics will include invertebrate, "simple system" approaches, imprinting, avian song learning, hippocampal and cerebellar function, and human pathology. Many of the readings will be from primary literature.

**PSYCH 342 Human Perception: Applications to Computer Graphics, Art and Visual Display**

Fall. 3 or 4 credits. The 4-credit option involves a term paper. Prerequisite: Psychology 101 or permission of instructor. Psychology 205 strongly recommended. Graduate students, see Psychology 642. T R 11:40-12:55. D. J. Field.

Our present technology allows us to transmit and display information over a variety of media. To make the most of these media, it is important to consider the limitations and abilities of the human observer. The course will consider a number of applied aspects of human perception with an emphasis on the

display of visual information. Topics to be covered include: "Three-dimensional" display systems, color theory, spatial and temporal limitations of the visual systems, attempts at subliminal communication, and "visual" effects in film and television.

**PSYCH 347 Psychology of Visual Communications**

Spring. 3 credits. Limited to 15 students. Prerequisites: Psychology 101 and permission of instructor. R 10:10-12:05. J. B. Maas.

An exploration of theories of education, communication, perception, attitude, and behavior change as they relate to the effectiveness of visually based communication systems. Emphasis is on the use of photography and computer graphics to deliver educational messages.

**PSYCH 350 Statistics and Research Design**

Fall. 4 credits. Limited to 120 students. M W F 9:05-9:55. T. D. Gilovich.

Acquaints the student with the elements of statistical description (measures of average, variation, correlation, etc.) and, more important, develops an understanding of statistical inference. Emphasis is placed on those statistical methods of principal relevance to psychology and related behavioral sciences.

**PSYCH 361 Biopsychology of Normal and Abnormal Behavior (also NS 361)**

Fall. 3 credits. Prerequisites: limited to 50 students in psychology and 50 students in nutritional sciences. An introductory biology course and an introductory psychology course, or permission of instructor. S-U grades optional. Juniors and seniors only. M W F 9:05-9:55. B. J. Strupp.

A critical evaluation of factors thought to underlie normal and abnormal behavior and/or cognitive functioning. Psychological, biological, and societal influences will be integrated. Topics include: (1) the psychobiology of learning and memory; (2) nutritional influences on behavior/cognition (e.g., sugar, food additives, choline); (3) cognitive dysfunction (e.g., amnesia, Alzheimer's disease); (4) developmental exposure to environmental toxins and drugs of abuse; and (5) psychiatric disorders (depression, eating disorders).

**[PSYCH 396 Introduction to Sensory Systems (also BIONB 396)]**

Spring. 3 or 4 credits (4 credits with term paper). Registration for the 4-credit option requires permission of instructor.

Prerequisites: an introductory course in biology or biopsychology, plus a second course in neurobiology or behavior or perception or cognition or biopsychology. Students will be expected to have elementary knowledge of perception, neurophysiology, behavior, and chemistry. No auditors. Offered alternate years. Graduate students, see Psychology 696. Not offered 1998-99. M W F 10:10. B. P. Halpern.

The course will be taught using the Socratic method, in which the instructor asks questions of the students. Students read, analyze, and discuss in class difficult original literature dealing with both those characteristics of sensory systems that are common across living organisms and those sensory properties which represent adaptations of animals to particular habitats or environments. Classroom



discussion can increase, but not decrease, a student's final grade. There are two preliminary exams and a final exam. The principles and limitations of major methods used to examine sensory systems will be considered. General principles of sensory systems, and auditory, visual, and somesthetic systems are covered. One aspect of each system (e.g., localization of objects in space by sound, color vision, thermoreception) will be selected for special attention. Two or more textbooks and a course packet of reproduced articles will be used. *An Introduction to the Physiology of Hearing*, 2nd edition by J. O. Pickles; *Hearing: Physiological Acoustics, Neural Coding, and Psychoacoustics*, by W. L. Gulick, G. A. Gescheider, and R. D. Frisina; *The Retina: An Approachable Part of the Brain*, by J. E. Dowling; *Handbook of Physiology—The Nervous System III. Sensory Processes*, edited by J. M. Brookhard and V. B. Mountcastle.]

**[PSYCH 402 Current Research on Psychopathology: Depression]**

Spring. 4 credits. Limited to 20 students. Prerequisite: Psychology 325 or HDFS 370 and permission of the instructor. M 1:25–4:25. Not offered 1998–99. Staff.

Current research and theory on the nature and etiology of depression. Approaches from various perspectives (biological, psychological, socio-cultural) are considered. Minimal attention to psychotherapy and symptomatology.]

**[PSYCH 404 Psychopathology and the Family]**

Spring. 4 credits. Limited to 20 students. Prerequisite: Psychology 325 or HDFS 370 and permission of the instructor. M 1:25–4:25. Not offered 1998–99. Staff.

This course will explore familial influences on the development of abnormal behavior. It will examine how psychological, biological, and cultural factors in a family might contribute to such disorders as anorexia nervosa, depression, sexual abuse, psychopathy, and psychosomatic illnesses. Emphasis will be placed on early childhood experiences in the family and their impact on the development of later psychopathology. The course will also discuss how the evolution of family structures in more recent times (e.g., the rise in day care and divorce) influences the individual. Family therapy approaches and techniques will also be examined.]

**PSYCH 410 Undergraduate Seminar in Psychology**

Fall or spring. 2 credits. Nonmajors may be admitted, but psychology majors are given priority. Hours to be arranged. Staff.

Information on specific sections for each term, including instructor, prerequisites, and time and place, may be obtained from the Department of Psychology office, 211 Uris Hall.

**[PSYCH 412 Laboratory in Cognition and Perception]**

Spring. 4 credits. Limited to 15 students. Prerequisite: statistics and one course in cognition or perception is recommended. Graduate students, see Psychology 612. Not offered 1998–99. M W 2:55–4:10. D. J. Field.

A laboratory course is designed to introduce students to experimental methods in perception and cognitive psychology. Students will take part in a number of classic

experiments and develop at least one independent project. Computers will be available and used in many of the experiments although computer literacy is not required. Projects will be selected from the areas of visual perception, pattern recognition, memory, and concept learning.]

**PSYCH 413 Information Processing: Conscious and Non-conscious**

Spring. 4 credits. Prerequisites: at least on course in human experimental and permission of instructor; Psychology 350 or equivalent will be useful for evaluating empirical articles. R 10:10–12:35. B. Khurana.

In the past decade or so, a not-so-quiet revolution has been taking place in the field of cognition regarding the problem of conscious mental computation. Data have come from patients with striking neuropsychological syndromes, i.e., the phenomenon of "blindsight" in which patients can respond to visual stimuli without the conscious experience of vision or the "amnesic" syndrome in which patients show interact learning and memory sans the awareness of the learning encounters. This signature of independent mental computations has also been amply demonstrated in normal individuals in laboratory settings. We will critically evaluate the theoretical worth and empirical justification of the distinction between "conscious" and "non-conscious" mental computations in normal and patient populations. Weekly readings will be from, but not limited to, topics such as visual processes, face recognition, explicit and implicit memory, language processing and social cognition. Students will be required to: (1) lead and partake in advanced level discussions of classic and current papers, (b) submit weekly summaries of the assigned readings, and (c) write a term paper on a topic of their interest. Students should be prepared to read extensively, think analytically, discuss cogently, and write succinctly.

**PSYCH 414 Comparative Cognition**

Spring. 3 credits. Prerequisites: Psychology 205, 209, 214, or permission of instructor. Graduate students, see Psychology 714. T R 11:40–12:55. M. J. Owen.

This course examines some of the conceptual and empirical work resulting from and fueling the recent surge of interest in animals' thinking. Specific topics may include whether nonhumans behave intentionally, show concept and category learning, memory, and abstract thinking similar to that of humans, the role of social cognition in the evolution of intelligence, and whether animals are conscious or self-aware. Evidence from communication studies in which animal signals provide a "window on the mind" will play a strong role in the deliberations, including studies of naturally occurring signaling in various species and experiments in which nonhumans are trained in human-like language behavior. Cognition in nonhuman primates will be a specific focus throughout. The course will be a mix lecture and discussion, emphasizing the latter as much as possible.

**[PSYCH 415 Concepts, Categories, and Word Meanings]**

Fall. 4 credits. Prerequisites: Psychology 205, 209, 214, or 215, or permission of instructor. Graduate students, see Psychology 615. M 1:25–4:25. Not offered 1998–99. Staff.

A consideration of what types of categories are psychologically important, of how they are represented and used through concepts, and of how concept structure and semantic structure are interrelated. Different models of concept structure and categorization processes are evaluated, as are models of conceptual change and concept acquisition. Other topics include: relations between concepts and broader knowledge representation systems such as scripts, mental models, and intuitive theories; relative roles of associative information and beliefs in concept structure; categorization in other species; neuropsychological studies of categorization; comparisons of categorization systems across cultures; and comparisons of concept structures across different types of categories.]

**[PSYCH 416 Modeling Perception and Cognition]**

Spring. 4 credits. Prerequisites: Psychology 205, 209, 214, or 215, or permission of instructor. M W F 11:15–12:05. Not offered 1998–99. M. Spivey-Knowlton.

This course offers a survey of several computational approaches to understanding perception and cognition. We will explore linear systems analysis, connectionist models, dynamical systems, and production systems, to name a few. Emphasis will be placed on how complex sensory information gets represented in these models, as well as how it gets processed. This course will cover computational accounts of language processing, language acquisition, visual perception, and visual development, among others. Students will complete a final project that applies a computational model to some perceptual/cognitive phenomena.]

**[PSYCH 417 The Origins of Thought and Knowledge]**

Fall. 4 credits. Prerequisites: Psychology 205, 209, 214, or 215, or permission of instructor. Graduate students, see Psychology 717. M 1:25–4:25. Not offered 1998–99. Staff.

An in-depth analysis of current theories concerning the growth of thought and knowledge in childhood. Several controversies will be discussed in detail, including: Are mental abilities organized in local domains or modules that have their own patterns of development, or is cognitive development a more general process? Do comparative studies with other species and evolutionary models provide any useful insights into cognitive development in humans? Are there qualitative restructurings of thought and knowledge with development, or is the process more continuous in nature? What restrictions should these developmental considerations place on models of thought and knowledge in adults?]

**PSYCH 418 Psychology of Music**

Spring. 3 or 4 credits, depending on whether student elects to do an independent project. Prerequisites: junior or senior standing with major in psychology or music and some background in both, or permission of instructor. Graduate students, see Psychology 618. M W 2:55–4:10. C. L. Krumhansl.

Detailed analysis of topics in the psychology of music, including theories of consonance, perception of tonal-harmonic structure, memory for music, and effects of musical training. Emphasis given to experimental methodologies.

**[PSYCH 419 Neural Networks Laboratory]**

Spring. 4 credits. Prerequisites: at least one course in biology or biological psychology, one year of calculus, and permission of instructor. Limited to 15 students. Graduate students, see Psychology 619. T R 2:55-4:10. Not offered 1998-99. D. J. Field.

The course will take a hands-on approach to understanding the limitations and successful applications of neural networks to problems in cognitive and biological psychology. A variety of neural network architectures will be discussed and explored using computer simulations. Applications of networks to perceptual recognition and representation will be emphasized. We will consider the class of problems that different networks can solve and consider the accuracy with which they model real nervous systems. Students will complete weekly lab reports and develop one independent project demonstrating the application of a neural network to a problem discussed in the course.]

**[PSYCH 420 Laboratory in Neuroethology (also BIONB 420-03)]**

Spring. 1 credit. Prerequisite: BIONB 424 or Psychology 424 or equivalent. Permission of instructor required. Lab: M 12:20-5:00. Not offered 1998-99. C. D. Hopkins. Designed as a laboratory component for BIONB 424/Psychology 424, this course will illustrate principles of neuroethology: sensory processing, neuroanatomy, and behavioral analysis. Students will participate in six laboratory exercises scheduled throughout the semester. The laboratory will be open from 12:20 until 5:00 p.m. on Mondays and Wednesdays. Labs will be done in groups of two. Students in this course will learn the fundamentals of electrophysiology, neuroanatomy, and behavior through a series of six laboratory exercises using electric fish, *Drosophila*, crayfish and *Limulus*, bats and moths.]

**[PSYCH 422 Developmental Biopsychology]**

Fall. 4 credits. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or BIONB 221). Graduate students, see Psychology 622. M W F 9:05-9:55. Not offered 1998-99. B. L. Finlay.

We will discuss the relationship of the development and evolution of the brain to the development of behavior. Topics include how neurons are generated, find targets, and establish connections; the emergence of reflexive and complex behavior; how experience affects the developing brain; evolutionary perspectives on the development of perception, memory, and communication systems; and abnormal development.]

**[PSYCH 424 Neuroethology (also BIONB 424)]**

Spring. 3 credits. Prerequisites: BIONB 221 and 222. S-U grades optional for graduate students only. T 9:05-11:00, R 9:05-9:55. Classes will be held on T R at 9:05-11:00. Thursday's class will run for one hour. Recitations will be scheduled in class. Not offered 1998-99. C. D. Hopkins.

In the 1950's-1970's ethologists attempted to understand the mechanisms of animal behavior through the use of comparative methods, evolutionary analysis, careful observations of animals in their native habitats, and clever experimentation. Now, with the explosion of knowledge and techniques in the neurosciences, many of the ethologist's mechanisms are being explained in terms of neural systems. This course will review the current status of research in neuroethology, including: mechanisms of acoustic communication in insects and in vertebrates; echolocation in bats and sound localization in owls; electroreception and electrolocation; chemical communication; and visual processing. In addition, it will review studies of the neural systems involved in decision making, in initiating action, and in coordinating fixed acts. Assigned readings will include original articles from the scientific literature. A term paper/poster on neuroethology will be required.]

**[PSYCH 425 Cognitive Neuroscience]**

Fall. 4 credits. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or BIONB 221). Graduate students, see Psychology 625. M W F 9:05-9:55. Not offered 1998-99. B. L. Finlay.

We will study the relation between structure and function in the central nervous system. The importance of evolutionary and mechanistic approaches for understanding the human behavior and cognition will be stressed. The course will focus on issues in cognitive neuroscience: mechanisms of perception, particularly vision, and the neuropsychology of everyday acts involving complex cognitive skills such as recognition of individuals, navigation in the world, language, memory, and social interaction.]

**[PSYCH 429 Olfaction and Taste: Structure and Function (also BIONB 429)]**

Fall. 3 or 4 credits (4-credit option requires a term paper or research project. The research project can, but does not need to, study nonhuman vertebrates). Preference given to junior and senior psychology and biology majors and graduate students. Prerequisite: one 300-level course in biopsychology or equivalent. Graduate students, see Psychology 629. T R 9:05. Not offered 1998-99. B. P. Halpern.

The structural and functional characteristics of olfaction and taste will be explored by reading and discussing current literature in these areas. Structure will be examined at the light levels of electron microscopes as well as at the molecular level. Function will be primarily neurophysiological and biochemical aspects. The emphasis will be on vertebrates, especially air-breathing vertebrates in the case of olfaction, but there will be some coverage of invertebrate forms. At the level of *Smell and Taste in Health and Disease*, edited by T. V. Getchell, R. L. Doty, L. M. Bartoshuk,

and J. B. Snow; *The Neurobiology of Taste and Smell*, edited by T. E. Finger and W. L. Silver.]

**[PSYCH 431 Effects of Aging on Sensory and Perceptual Systems (also BIONB 421)]**

Fall. 3 or 4 credits; the optional (or fourth) credit involves a term paper. Prerequisites: an introductory course in biology or psychology, plus a second course in perception or neurobiology or cognition or psychology. No auditors. Limited to 25 students. Graduate students, see Psychology 631. T R 10:10-11:25. B. P. Halpern.

A literature-based examination of post-maturation changes in the perceptual, structural, and physiological characteristics of somesthetic, chemosensory, visual, and auditory systems. Emphasis will be on human data, with non-human information included when especially relevant. Current developments in human sensory prosthetic devices, and in regeneration of receptor structures, will be examined. Brief written statements (by electronic mail) of questions and problems related to each set of assigned readings will be required at least one day in advance of each class meeting. This course will be taught using the Socratic Method, in which the instructor asks questions of the students. Students read, analyze, and discuss in class difficult original literature dealing with the subject matter of the course. Students are expected to come to each class having already done, and thought about, the assigned readings.

**[PSYCH 436 Language Development (also HDFS 436, LING 436, and COG ST 436)]**

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll under HDFS 633/LING 700/PSYCH 600, a supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. S-U grades optional. T R 2:55-4:10. B. Lust.

This course surveys basic issues, methods, and research in the study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental issues of relationships between language and thought are discussed, as are the fundamental linguistic issues of Universal Grammar and the biological foundations for language acquisition. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child. An optional lab course supplement is available. (See Cog St. 450/Ling 450 and Psych 437)

**[PSYCH 437 Lab Course: Language Development (also LING 450 and COGST 450) (in conjunction with HDFS/LING 436, Language Development)]**

Spring. 2 credits. B. Lust. This laboratory course will provide undergraduates with an introduction to hands-on research experience in the Cognitive Studies Research Labs. This course is partially funded by a new National Science Foundation grant to Cornell's Cognitive Studies program, "Interdisciplinary Approaches to the Scientific Study of Language Knowledge and Acquisition." This project is intended to involve

undergraduates in active research and to coordinate related subfields of several disciplines in a unified, laboratory-supported curriculum.

This course will include several structured modules dealing with topics covered in the survey course, HD/LING/PSYCH 436, Language Development. They will include training in how to study and analyze original child language data, including the use of selected portions of a large database of child language data from many languages in the Cornell Language Acquisition Lab (CLAL), and training necessary to the collection and analysis of new child language data. Emphasis will be placed on developing research methods in order to test hypotheses.

The course will meet once a week in group format. In addition, students will be given access to a research lab environment for independent work on assigned modules, and independent research, throughout the week, and throughout the term.

#### **PSYCH 440 The Brain and Sleep**

Fall. 4 credits. Prerequisites: at least Psychology 223 or BIONB 221. An additional course in biology, biopsychology or neurobiology is recommended. S-U grades optional. Graduate students, see Psychology 640. M W 8:40-9:55. H. S. Porte.

Taking a comparative evolutionary perspective, this course examines the neural events that instigate, maintain, and disturb the states and rhythms of sleep in various species. Emphasizing human data where possible, special topics will include sleep deprivation and the biological functions of sleep; sleep's putative role in learning and memory; biologically interesting deviations from normal sleep; the cognitive neuroscience of sleep.

#### **PSYCH 441 Laboratory in Sleep Research**

Spring. 4 credits. Prerequisites: Psychology 440 or comparable preparation, and permission of the instructor during preregistration. Laboratory fee: \$50. Graduate students, see Psychology 641. W 7:30-10:30 p.m. H. S. Porte.

Emphasizing the neurobiology of sleep state, the course introduces the laboratory study of human sleep and its psychological correlates. Serving as both experimenter and subject, each student will learn the physical rationale and techniques of electroencephalography and other bioelectric measures of behavioral state. Using computerized data analysis, students will complete weekly laboratory reports and a collaborative term project. Sleep recordings will be done during the day or evening when possible. In addition, overnight recording sessions are required.

#### **PSYCH 450 The Lenses of Gender (also Women's Studies 450)**

Spring. 4 credits. Limited to 15 seniors and graduate students. Prerequisites: 1) senior or graduate standing, with preference given to psychology majors and women's studies majors; 2) both a course related to gender and/or sexuality and a course related to clinical and/or personality psychology. Permission of instructor required. No preregistration. Interested students should attend first class. Letter grade only. Graduate students, see Psychology 650/Women's Studies 650. F 2:30-4:25. S. L. Bem.

The focus of this seminar is the intersection of gender and clinical psychology. Rather than surveying a broader array of topics more superficially or studying a single topic in very great depth, the seminar will take up several gender- and sexuality-related issues in moderate depth over the course of several weeks. Possible topics include depression, eating disorders, recovery of false memories, transgender, needs of lesbian and gay clients. Course requirements will likely include a final essay examination and a term paper or a class presentation.

#### **PSYCH 470 Undergraduate Research in Psychology**

Fall or spring. 1-4 credits. S-U grades optional. Written permission from the staff member who will supervise the work and assign the grade must be included with the course enrollment material. Students should enroll in the section listed for that staff member. A section list is available from the Department of Psychology. Hours to be arranged. Staff.

Practice in planning, conducting, and reporting independent laboratory, field, and/or library research.

#### **PSYCH 471 Advanced Undergraduate Research in Psychology**

Fall or spring. 1-4 credits. S-U grades optional. Written permission of the staff member who will supervise the work and assign the grade must be included with the course enrollment material. Students should enroll in the section listed for that staff member. A section list is available from the Department of Psychology. Hours to be arranged. Staff.

Advanced experience in planning, conducting, and reporting independent laboratory, field, and/or library research. One, and preferably two, semesters of Psychology 470 is required. The research should be more independent and/or involve more demanding technical skills than that carried out in Psychology 470.

#### **PSYCH 472 Multiple Regression**

Spring, weeks 1-7. 2 credits. Prerequisite: one solid semester of introductory statistics. Analysis of variance is helpful but not required. M W F 10:10. R. B. Darlington.

Uses and pitfalls of multiple regression in causal analysis, path analysis, and prediction. Emphasis on analyzing data collected under uncontrolled conditions. Includes collinearity, indicator variables, sets, adjusted and shrunken  $R^2$ , suppressors, hierarchical analysis, overcontrol, experimental design. Very little hand computation; uses MYSTAT computer program.

#### **PSYCH 473 General Linear Model**

Spring, weeks 8-14. 2 credits. Prerequisite: Psychology 472 or equivalent. M W F 10:10. R. B. Darlington.

Includes multicategorical variables, corrections for multiple tests, diagnostic methods, nonlinear relationships, interaction, main and simple effects, and basic power analysis. Emphasizes MYSTAT and SYSTAT, briefly discusses SAS PROC REG and SAS PROC GLM.

#### **PSYCH 475 Multivariate Analysis of Psychological Data**

Fall. 2 credits. Prerequisite: Psychology 473 or permission of instructor. R 10:10-12:05. R. B. Darlington.

Students vote on topics to cover, choosing among nonparametric methods, time series,

cluster analysis, multidimensional scaling, component analysis, factor analysis, MANOVA, canonical correlation, repeated measures, logistic regression, log-linear models, corrections for unreliability in regression, nesting, power analysis, influence analysis, and other topics. First class sketches all these topics before vote.

#### **[PSYCH 478 Psychometric Theory**

Fall. 2 credits. Prerequisite: Psychology 472 or permission of instructor. Not offered 1998-99. T R 10:10-12:05. R. B. Darlington.

Statistical methods relevant to the use, construction, and evaluation of psychological tests.]

#### **[PSYCH 479 Multisample Secondary Analysis**

Fall, weeks 11-14. 1 credit. Prerequisite: Psychology 350 or equivalent. Not offered 1998-99. T R 10:10-12:05. R. B. Darlington.

Statistical methods for analyzing and integrating the results of many independent studies on related topics.]

#### **PSYCH 481 Advanced Social Psychology**

Fall. 4 credits. Limited to 20 students, by application. Senior psychology majors have priority. Graduate students, see Psychology 681. T R 10:10-11:25. D. T. Regan.

Selected topics in social psychology are examined in depth with an emphasis on the relationship between experimental research and the development of theory. Readings will be mostly primary sources. Among the theoretical approaches to social behavior we may discuss are social comparison theory, cognitive dissonance, attribution processes and social judgment, dramaturgy and impression management, and evolutionary perspectives.

#### **PSYCH 489 Seminar: Beliefs, Attitudes, and Ideologies**

Fall. 4 credits. Prerequisites: admission is by application during the spring preregistration period. Seniors are given priority. M 2:30-4:25. D. J. Bem.

The seminar examines fundamental properties of beliefs and attitudes: how they are formed and changed, what psychological functions they serve for the individual, and how they coalesce into belief systems or ideologies. Several specific ideologies are examined in detail: for example, the political ideologies of the American public, gender, sexual orientation, the ideological factors that promote anorexia in a society, the contrasting world-views of "pro-choice" and "pro-life" activists, the ideologies of psychology and science, and more. Participants write weekly commentaries on the readings in addition to a term paper examining a particular ideology.

#### **PSYCH 491 Research Methods in Psychology**

Spring. 4 credits. Enrollment limited to 25 students. Recommended: permission of instructor, Psychology 350, experience in upper-division psychology courses, or graduate standing. Graduate students, see Psychology 691. T R 10:10-11:25. D. A. Dunning.

An intensive examination of the basic research methods used in social, personality, cognitive, and developmental psychology. The course will focus on designing and conducting experiments, i.e., how to turn vague theories

into concrete and testable notions, evaluate studies, avoid common pitfalls, and, finally, remain ethical. Beyond learning methods of "correct" and rigorous experimentation, we will also discuss what makes a research study actually interesting. The course in addition, will cover test construction, survey methods, and "quasi experiments." Students will concentrate on completing a small research project in which they conduct an experiment, interpret its data, and write up the results.

**PSYCH 492 Sensory Function (also BIONB 492)**

Spring. 4 credits. Limited to 25 students. Prerequisite: a 300-level course in biopsychology, or BIONB 222 or BIOAP 311, or permission of the instructors. Students are expected to have a knowledge of elementary physics, chemistry, and behavior. S-U grades optional. Offered alternate years. Graduate students, see Psychology 692. Not offered 2000-2001. M W F 10:10. B. P. Halpern and H. C. Howland.

This course covers classical topics in sensory function such as vision, hearing, touch and balance, as well as some more modern topics like sensory coding, location of stimulus sources in space, the development of sensory systems, and non-classical topics such as electroreception and internal chemoreceptors. Both human and nonhuman systems are discussed. In all cases the chemical, physical, and neurophysiological bases of sensory information are treated, and the processing of this information is followed into the central nervous system. This course will be taught using the Socratic method, in which the instructors ask questions of the students, and their answers will be discussed. Students will be expected to come to each class having read, thought about, and prepared to discuss, the assigned readings and other assigned information resources. Students will submit brief analyses of, and comments and questions on, all assignments by e-mail to the course's electronic mailing list a day before each class meeting. The mailing list will distribute submissions to all members of the class and to the instructors. In addition to these brief triweekly written exercises, a term paper in the form of a review article will be required.

**Advanced Courses and Seminars**

Advanced seminars are primarily for graduate students, but with the permission of the instructor they may be taken by qualified undergraduates. The selection of seminars to be offered each term is determined by the needs of the students.

A supplement describing these advanced seminars is available at the beginning of each semester and can be obtained from the department office (211 Uris Hall). The following courses may be offered either term and carry 4 credits unless otherwise indicated.

**PSYCH 510-511 Perception**

**PSYCH 512-514 Visual Perception**

**PSYCH 518 Topics in Psycholinguistics**

**PSYCH 519-520 Cognition**

**PSYCH 521 Psychobiology**

**PSYCH 522 Topics in Perception and Cognition**

**PSYCH 523 Hormones and Behavior**

**[PSYCH 524 Sex Differences in Brain and Behavior (also BIONB 626)]**

Spring. 2 credits. Limited to 12 seniors and graduate students. Not offered 1998-99. Hours to be arranged. T. J. DeVoogd.

A survey of the newly discovered animal models for sex differences in the brain. Topics include the role of steroids in brain development, whether hormones can modify the structure of the adult brain, and the consequences of such sex differences in anatomy for behavior.]

**PSYCH 527 Topics in Biopsychology**

**PSYCH 535 Animal Behavior**

**PSYCH 541 Statistics in Current Psychological Research**

**PSYCH 580 Experimental Social Psychology**

**PSYCH 600 General Research Seminar**  
Fall or spring. No credit.

**PSYCH 601 Computational Models of Language**

Spring. 4 credits. R 10:10-12:05.

Prerequisites: consent of instructor. M. Spivey.

This seminar will involve in-depth discussion of a range of computational approaches to language representation, processing, and acquisition. We will cover phrase-structure grammars, context-free grammars, connectionist models, statistical natural language processing, and dynamical systems, to name just a few. There will also be some hands-on experience writing models in a computer lab using the MATLAB programming environment.

**PSYCH 605 Perception (also Psychology 205)**

Spring. 4 credits. T R 11:40-12:55.

J. E. Cutting.

**[PSYCH 607 Chemosensory Perception (also Psychology 307)]**

Fall. 4 credits. T R 9:05. Not offered 1998-99. B. P. Halpern.]

**[PSYCH 611 Introduction to Human Memory (also Psychology 311)]**

Spring. 4 credits. T R 11:40-12:55. Not offered 1998-99. B. Khurana.]

**[PSYCH 612 Laboratory in Cognition and Perception (also Psychology 412)]**

Spring. 4 credits. M W 2:55-4:10. Not offered 1998-99. D. J. Field.]

**[PSYCH 613 Obesity and the Regulation of Body Weight (also Nutritional Sciences 315)]**

Spring. 3 credits. Limited to 30 students. Prerequisites: one course in psychology and one course in nutrition. Undergraduate students may register with permission of instructor. S-U grades optional. Offered alternate years. T 1:30-3:30. Not offered 1998-99. D. A. Levitsky.

This course is a multidisciplinary discussion of the causes, effects, and treatments of human obesity. Topics include the biopsychology of eating behavior, the genetics of obesity, the role of activity and energy metabolism, psychosocial determinants of obesity, anorexia nervosa, therapy and its effectiveness, and social discrimination.]

**PSYCH 614 Issues in Cognitive Psychology (also Psychology 214)**

Fall. 4 credits. M W F 10:10. B. Khurana.

**[PSYCH 615 Concepts, Categories, and Word Meaning (also Psychology 415)]**

Fall. 4 credits. M 1:25-4:25. Not offered 1998-99. F. C. Keil.]

**PSYCH 618 Psychology of Music (also Psychology 418)**

Spring. 4 credits. M W 2:55-4:10. C. Krumhansl.

**[PSYCH 619 Neural Networks Laboratory (also Psychology 419)]**

Spring. 4 credits. T R 2:55-4:10. Not offered 1998-99. D. J. Field.]

**[PSYCH 622 Developmental Biopsychology (also Psychology 422)]**

Fall. 4 credits. M W F 9:05-9:55. Not offered 1998-99. B. L. Finlay.]

**[PSYCH 625 Cognitive Neuroscience (also Psychology 425)]**

Fall. 4 credits. M W F 9:05-9:55. Not offered 1998-99. B. L. Finlay.]

**PSYCH 626 Evolution of Human Behavior (also Psychology 326)**

Fall. 4 credits. T R 2:55-4:10. R. E. Johnston.

**[PSYCH 629 Olfaction and Taste: Structure and Function (also Psychology 429 and BIONB 429)]**

Spring. 4 credits. T R 9:05. Not offered 1998-99. B. P. Halpern.]

**PSYCH 631 Effects of Aging on Sensory and Perceptual Systems (also Psychology 431 and BIONB 421)**

Fall. 4 credits. T R 10:10-11:25. B. P. Halpern.

**PSYCH 632 Biopsychology of Learning and Memory (also Psychology 332 and BIONB 328)**

Spring. 4 credits. M W F 11:15. T. J. DeVoogd.

**PSYCH 640 The Brain and Sleep (also Psychology 440)**

Fall. 4 credits. M W 8:40-9:55. H. S. Porte.

**PSYCH 641 Laboratory in Sleep Research (also Psychology 441)**

Spring. 4 credits. W 7:30-10:30. H. S. Porte.

**PSYCH 642 Human Perception: Applications to Computer Graphics, Art, and Visual Display (also Psychology 342)**

T R 11:40-12:55. D. J. Field.

**PSYCH 650 The Lenses of Gender (also Psychology 450 and Women's Studies 450 and Women's Studies 650)**

Spring. 4 credits. F 2:30-4:25. S. L. Bem.

**PSYCH 681 Advanced Social Psychology (also Psychology 481)**

Fall. 4 credits. T R 10:10-11:25. D. T. Regan.

**PSYCH 689 Seminar: Beliefs, Attitudes and Ideologies (also Psychology 489)**

Fall. 4 credits. M 2:30-4:25. D. J. Bem.

**PSYCH 691 Research Methods in Psychology (also Psychology 491)**

Spring. 4 credits. T R 10:10-11:25. D. A. Dunning.



**PSYCH 692 Sensory Function (also Psychology 492 and BIONB 492)**  
Spring. 4 credits. Not offered 2000–2001.  
M W F 10:10. B. P. Halpern and  
H. C. Howland.

**[PSYCH 696 Introduction to Sensory Systems (also Psychology 396 and BIONB 396)]**  
Spring. 4 credits. Not offered 1998–99.  
M W F 10:10. B. P. Halpern.]

**PSYCH 700 Research in Biopsychology**

**PSYCH 709 Developmental Psychology (also Psychology 209)**  
Spring. 4 credits. T R 10:10–11:25. Staff.

**PSYCH 710 Research in Human Experimental Psychology**

**PSYCH 713 Information Processing: Conscious and Non-conscious (also PSYCH 413)**  
Spring. 4 credits. R 10:10–12:35.  
B. Khurana.

**PSYCH 714 Comparative Cognition (also Psychology 414)**  
Spring. 4 credits. T R 11:40–12:55.  
M. J. Owren.

**PSYCH 715 Psychology of Language (also Psychology 215)**  
Fall. 4 credits. M W F 11:15. J. Sereno.

**PSYCH 716 Auditory Perception (also Psychology 316)**  
Fall. 4 credits. T R 10:10–11:25.  
C. L. Krumhansl.

**[PSYCH 717 The Origins of Thought and Knowledge (also Psychology 417)]**  
Fall. 4 credits. M 1:25–4:25. Not offered  
1998–99. F. C. Keil.]

**PSYCH 720 Research in Social Psychology and Personality**

**PSYCH 722 Hormones and Behavior (also Psychology 322 and BIONB 322)**  
Spring. 3 credits. M W F 11:15–12:05.  
E. A. Regan.

**PSYCH 773–774 Proseminar in Cognitive Studies I and II (also COGST 773/774, PHIL 773/774, LING 773/774, and COMS 773/774)**  
Fall: R grade. Spring: S-U only.  
4 credits.

The Cognitive Studies Proseminar consists of two semesters of meetings with the graduate faculty in the field of Cognitive Studies. The proseminar will consist of a general introduction to the field of Cognitive Studies including an introduction to each of the major disciplines that make up the minor: i.e., computer science, linguistics, philosophy, and psychology. In each of these disciplines, faculty members from the field will introduce the theoretical and methodological issues that underlie the field and its relation to Cognitive Studies; in addition, they will introduce various labs in which active research is being conducted in their field at Cornell.

The proseminar will include suggestions from faculty in each field for further advanced interdisciplinary research that can be pursued at Cornell during a Cognitive Studies minor. It will conclude (end of second term) with individual student presentations in which students initiate a critique of some interdisciplinary research, after consultation with a faculty member of their choice.

Although suitable to entering graduate students, the proseminar is also open to graduate students beyond their first year. Advanced undergraduates with a Cognitive Studies concentration may also be admitted. This is a year-long lecture and discussion course. The year-long commitment is mandatory. An "R" grade will be assigned in the fall semester, and a S-U grade only will be assigned in the spring semester.

**PSYCH 775 Proseminar in Social Psychology I**

Fall. 2 credits. Limited to 10 graduate students in social psychology. Hours to be arranged. D. A. Dunning, T. D. Gilovich and D. T. Regan.

This is the first term of a year-long discussion-seminar course intended to give graduate students an in-depth understanding of current research and theory in social psychology. The course will emphasize social cognition, but other topics, such as group dynamics, social influence, the social psychology of language, emotional experience, etc., will be covered.

**PSYCH 776 Proseminar in Social Psychology II**

Spring. 2 credits. Limited to 10 graduate students in social psychology. Hours to be arranged. D. A. Dunning, T. D. Gilovich, and D. T. Regan.

This is the second half of a year-long discussion-seminar course intended to give graduate students an in-depth understanding of current research and theory in social psychology. The course will emphasize social cognition, but other topics, such as group dynamics, social influence, the social psychology of language, emotional experience, etc., will be covered.

**PSYCH 900 Doctoral Thesis Research in Biopsychology**

**PSYCH 910 Doctoral Thesis Research in Human Experimental Psychology**

**PSYCH 920 Doctoral Thesis Research in Social Psychology and Personality**

### Summer Session Courses

The following courses are also frequently offered in the summer session, though not necessarily by the same instructor as during the academic year. Not all of these courses will be offered in a particular summer. Information regarding these courses and additional summer session offerings in psychology is available from the department before the end of the fall semester.

**PSYCH 101 Introduction to Psychology: The Frontiers of Psychological Inquiry**

**PSYCH 123 Introduction to Biopsychology**

**PSYCH 128 Introduction to Psychology: Personality and Social Behavior**

**PSYCH 199 Sports Psychology**

**PSYCH 280 Introduction to Social Psychology**

**PSYCH 350 Statistics and Research Design**

### QUECHUA

See Language Courses under Modern Languages.

## RELIGIOUS STUDIES MAJOR

See under "Special Programs and Interdisciplinary Studies."

## ROMANCE STUDIES

The Department of Romance Studies (Mitchell Greenberg, chair) offers courses in French literature, Italian literature, and Spanish literature. In addition, the department's program includes courses in the French and Spanish languages, French linguistics, Spanish linguistics, semiotics, and Francophone, Italian, and Hispanic culture. Through its course offerings and opportunities for independent study, the department seeks to encourage study of the interactions of the Romance literatures among themselves, with other literatures, and with other fields of inquiry.

### French

J. Béraud, director of undergraduate studies; A. Berger, A. M. Colby-Hall, emerita; N. Furman, M. Greenberg, chair; D. I. Grossvogel, emeritus; R. Klein, P. Lewis, K. Long, J. Ngate, A. Seznec, S. Tarrow, M.-C. Vallois, L. R. Waugh.

### The Major

The major in French is divided into three options: French Area Studies, French linguistics, and French literature. For a description of the linguistics option, see Modern Languages or Linguistics, French. The area studies and literature options are described below.

While prospective majors should try to plan their programs as far ahead as possible, especially if they intend to study abroad, no student will be refused admission merely because of a late start. Students wishing to major in French Area Studies or French literature should consult the director of undergraduate studies in the French section of the Department of Romance Studies, Professor Jacques Béraud.

In view of the ongoing curriculum changes that will be implemented in 1999–2000, please see the Romance Studies undergraduate director. This consultation is especially important in order to know the sequence of courses that will follow the current choice of courses.

### The Literature Option

The major in French, literature option, is designed to give students proficiency in the oral and written language, to acquaint them with French literature and culture, and to develop skills in literary analysis.

### Admission

To be admitted to the major, students should have completed FRLIT 201, 220, or 221 plus 222 and FRDML 213 or its equivalent by the end of their sophomore year.

*For completion of the major, a student must:*

- (1) acquire a sound degree of competence in French language. This competence is demonstrated by the successful completion of French 301–312 or their equivalents, such as properly accredited study

abroad or the passing of a special language test (the CASE examination) or the permission of the adviser (this option applies only to 312).

- (2) take six courses in French literature or civilization at the 300 level or above. These courses, selected in consultation with the student's major adviser, will include at least two pre-19th-century courses and at least one 400-level course.
- (3) take two connected courses in one of the following related areas: literature, linguistics, comparative literature, history, history of art, music, government or another relevant discipline with a significant French component. Students who are double majors are exempted from this last requirement.

### The French Area Studies Option

#### Admission

To be admitted to the major, students should have completed French Literature 201, 220, 221 or 224 plus French Language 213 or its equivalent by the end of their sophomore year.

*For completion of the major, a student must:*

- (1) acquire a sound degree of competence in the French language. This competence is demonstrated by the successful completion of French 301-312 or their equivalents, such as properly accredited study abroad or the passing of a special language test (the CASE examination) or the permission of the adviser (this option applies only to 312).
- (2) take two courses in Romance Studies (literature or civilization) at the 300 level or above.
- (3) take six courses at the 300 level or above in no more than three areas of interest such as—but not limited to—Africana studies, anthropology, comparative literature, French literature, economics, government, history, history of art, linguistics, music, theater arts, women's studies. Each area must be represented by at least two courses, and each course must have a significant French component. At least one of these six courses should be at the 400 level.

### Administration of French Area Studies

Students are admitted to the major by the director of undergraduate studies in the French section of the Department of Romance Studies, but will be guided by their individual advisers. A copy of each student's program will be given to the director of undergraduate studies for approval and safekeeping.

### Study Abroad in France

French majors or other interested students may study in France for one or two semesters during their junior year. Opting for one of several study-abroad plans recognized by the departments of Romance Studies, Modern Languages, and Linguistics facilitates the transfer of credit. Information about these plans is available from the director of undergraduate studies.

Students must be Cornell undergraduates with a strong academic record. The minimum French preparation is the completion of FRDML 213 or its equivalent in advanced credit or placement by the Cornell CASE

examination. The taking of FRROM 301 and/or 312 is, however, strongly recommended.

Students interested in studying in France are encouraged to consider the special benefits offered by EDUCO, the program in Paris cosponsored by Cornell and by Duke University. EDUCO offers advanced students a challenging course of study and the experience of total immersion in French life and culture in Paris. Participants in this program spend the year or the semester as fully matriculated students at the University of Paris VII and other institutions of higher learning in Paris, including the Institut d'Etudes Politiques (Sciences Po), selecting courses in many fields from the regular university course offerings. Students begin the academic year with an intensive three-week orientation into French history, society, and daily life. While it is possible to enroll in the EDUCO Program for one semester, admission will be given first to students planning to study abroad for the full academic year.

EDUCO maintains a center in Paris with appropriate support staff. The resident director, chosen annually from the Cornell and Duke faculties, teaches a special seminar each semester, provides academic advice, and helps ensure the quality of the courses. The center, which includes a small library and word-processing facilities, is regularly used by students for special tutorials, seminars, and lectures, as well as informal gatherings.

**Honors.** The honors program encourages well-qualified students majoring in French literature or culture to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, provides a unique learning opportunity, since it allows for wide reading and extensive rewriting to a degree not possible in the case of course papers.

No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have agreed to supervise their work. They may receive course credit by enrolling in French 429-430, but these independent study courses must be taken in addition to the courses that meet the minimum requirements for the major. At the end of the senior year, each honors student is examined orally on the honors essay by a jury consisting of his or her faculty adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.

**Fees.** Depending on the course, a small fee may be charged for copies of texts used in course work.

### Language and Linguistics

Most language courses and French linguistics courses are offered by the Department of Modern Languages and the Department of Linguistics. Further language courses (conversation and advanced level), French linguistics courses, and all literature courses are listed below.

*Note: Students placed in the 200-level courses have the option of taking language and/or literature courses; see listings under "Literature" for descriptions of the literature courses, some of which may be taken concurrently with French Language 200, 203, 205, or 213*

*(offered by Modern Languages and by Linguistics) or Hotel Administration 266.*

### FRROM 301 Advanced French I

Fall or spring. 4 credits. Limited to 15 students. Prerequisite: FRDML 213 or Q++ on the Cornell Advanced Standing Examination (CASE). Fall: J. Bereaud or I. Daly; spring: I. Daly and staff.

Class discussions based on reading of selected contemporary texts: half will be short stories by 20th-century writers, half will be articles on current events taken from French magazines or newspapers. All texts are chosen for thematic or cultural interest and linguistic quality. Special attention will be given to correctness and accuracy in French through grammar review and weekly papers (essays or translations). Two films will be shown to illustrate today's idiomatic language. Course required of French majors.

### FRROM 312 Advanced French II

Fall or spring. 4 credits. Limited to 15 students. Prerequisite: FRROM 301 or placement by the Cornell Advanced Standing Examination (CASE). Fall or spring: J. Bereaud and staff.

Continuation of work done in French 301. The objective of French 301 is to teach students to speak and write correct French; in French 312 students will be expected to have a richer, more idiomatic and hopefully elegant command of the language.

Formal study of grammar will be discontinued, and more attention will be devoted to the examination of texts and to oral presentations by students. Weekly papers as in French 301.

### Literature

#### FRLIT 201 Introduction to Techniques of Reading French Literature

Fall or spring. 3 credits. Prerequisite: qualification in French (SAT II score of 600, LPF score of 56, or French 123). Fall, K. Long and staff; spring, N. Furman and staff.

French 201, like all other 200-level French literature courses, satisfies the language requirement by giving proficiency in French. Students with an SAT II score of 640 or more, or an LPF score of 60 or more, should take French 221.

French 201 is divided into small sections and is conducted in French.

French 201 is designed for students interested in improving their written and oral skills in French and also their literary proficiency. Texts have been chosen both for their literary merit and their manageable linguistic difficulty. Close scrutiny of the works and active class discussions will sharpen students' critical and analytical abilities. Different genres are covered (poetry, drama, and narrative prose); and the reading list may include authors such as Baudelaire, Beckett, Ionesco, Camus, Duras, Rimbaud and Sartre.

#### FRLIT 220 French and Francophone Culture @

Fall. 3 credits. Prerequisite: SAT II score of 640 and above, or LPF score of 60, or FRDML 200, 203 or 205. Conducted in French. J. Ngaté.

This course serves as an introduction to French Area Studies. It provides an overview of Francophone culture and society from 1945 to the present. Readings will include a

selection of articles dealing with issues of current concern in France; works by French and Maghrebi or African writers; poetry or drama; two films will also be discussed.

**FRLIT 221 Modern French Literature #**

Fall or spring. 3 credits. Prerequisites: SAT II score of 640 and above, or LPF score of 60, or FRDML 200, 203, or 205. Conducted in French. Fall: N. Furman and staff; spring: J. Ngate and staff.

This course, divided into small sections, is intended as an introduction to French literature of the modern period. Texts have been chosen both as a function of their centrality to the traditional literary canon and with an eye to experimentation. The course considers literary genres (poetry, drama, the novel) as solicitations to read texts differently, at different speeds, with diverse claims on our attention. The course is designed to satisfy a general interest in modern French literature as well as to prepare students to pursue a French major in literature. Readings will include works by Baudelaire, Apollinaire, Sartre, Ionesco, Beckett, Proust, Duras.

**FRLIT 222 Early Modern French Literature #**

Spring. 3 credits. Prerequisite: FRLIT 201, 220, 221 or permission of the instructor. Required of all literature majors, but not limited to them. Conducted in French. M. C. Vallois.

Study of the classic literature of seventeenth-century France (Corneille, Racine, Molière, Mme. de Lafayette, La Fontaine) and of eighteenth-century Enlightenment literature (Voltaire, Rousseau, Diderot, Beaumarchais). Special attention is paid to the ways in which these various works represent or deal with the shift from an aristocratic cultural code of values to modern bourgeois ideology and aesthetics. The course will also invite reflection on the status and centrality of female characters in classical and neo-classical French literature; it will attempt to trace the evolution from the classical tragic heroine to more modern (but no less problematic) representations of women.

**FRLIT 224 The French Experience: An Introduction**

Fall. 3 credits. M. Greenberg and S. Kaplan.

An examination of French society, culture, and institutions. What has made French culture so distinctive? Its literature and its revolutions, its gastronomy and fashion, its painting, cathedrals, and cinema. Looking attentively at texts, images, and contexts from selected moments in the eighteenth, nineteenth, and twentieth centuries, we will attempt to unravel some of the defining enigmas of the French experience. Readings available both in French and in English translation.

Note: Prerequisite for all 300-level courses in French literature: FRLIT 201, 220, 221, or the equivalent.

**FRLIT 315 Modern European Literature and Culture (also COML 311 and RUSSL 311)**

4 credits. Spring. Conducted in English. G. Gibian.

For description, see Comparative Literature 311.

**FRLIT 321 French Civilization I: History, Culture, and Cinema**

Fall. 4 credits. Conducted in French. J. Béreaud.

This course will investigate the past as it has shaped the present, focusing on some salient episodes that span 20 centuries of French history from the Roman occupation of Gaul to the events of May 1968. Three types of materials will be studied: a history text, documents of cultural significance (literature, art, popular culture) and a few films to help bring the past to life.

Students will select topics of personal interest for research and oral presentation in class: these topics could range from the investigation of historic figures such as Joan of Arc, Louis XIV or Napoléon to the effects of recent wars on the national psyche; from the art of the stained glass windows of the medieval cathedrals to the technological revolution that prepared the way for the first flight of the Supersonic Concorde in 1969.

**FRLIT 322 French Songs**

Spring. 4 credits. Prerequisite: FRDML 213. Conducted in French. J. Béreaud. "Everything in France ends in a song." The course will examine the truth of this old adage and study French songs as a reflection of the French experience. Various approaches will include: an overview of traditional folklore songs (typically pre-revolutionary), a study of certain genres: the "realist" and the "poetic" traditions, love songs, protest songs, drinking songs, children's songs, etc., a study of a few artists who have had a major influence in France after WWII—such as E. Piaf, G. Brassens, L. Ferré, J. Brél. Students will be expected to give oral presentations on artists of their own choosing, and to write one short paper and one research paper on a major figure or a particular genre or period (sea shanties, songs of the "Front Populaire" or of World War II, French rap songs, etc.).

**FRLIT 323 Francophone Fiction of the Maghreb @**

Spring. 4 credits. Conducted in French. S. Tarrow.

The course will trace the development of francophone fiction in the Maghreb from the 1930s, when the French celebrated a century of colonial power in North Africa, through the violent struggles for independence to the post-colonial period and the current civil war in Algeria. Texts will be selected from the works of authors such as Tahar ben Jelloun, Rachid Boujedra, Albert Camus, Mohammed Dib, Assia Djebar, Kateb Yacine, Albert Memmi, Fatima Mernissi, Rachid Mimouni, Leila Sebbar. Topics for discussion will range from French colonialism and its aftermath to issues of language, religion, and gender. We will also focus on the role of fiction and its readings in a period of extreme political and social change.

**FRLIT 333 Contemporary French Thought**

Fall. 4 credits. Conducted in French. R. Klein.

This course is intended to introduce students to the work of some of the major figures in contemporary French thought, in writing published since the events of May 1968. A broad range of topics and issues will be examined, with particular attention to those that have transformed traditional academic disciplines. Books have been selected not only with a view to their theoretical interest, but with an eye to the quality of their French prose. Readings will include works by Lévi-Strauss, Foucault, Cixous, Irigaray, Kristeva, Derrida, Barthes, Baudrillard.

**FRLIT 349 Love and Hate in the Middle Ages (also FRLIT 649) #**

Fall. 4 credits. Prerequisite: FRLIT 221 or permission of instructor. Conducted in French. K. Long.

This course is designed to offer an introduction to medieval French literature and old French while tracing the invention and decline of courtly ideals and the rise of satirical misogyny. The basic tenets of courtly love and courtly poetics will be illustrated by selections from the *Lais* of Marie de France, the *Chevalier au Lion* of Chrétien de Troyes, and the *Roman de la Rose* of Guillaume de Lorris. Satirical revisions of the courtly ideal will be studied in selections from the *Roman de la Rose* of Jean de Meun, the lyric poetry of Rutebeuf, Charles d'Orléans, François Villon, and Christine de Pizan, as well as in medieval farces and fabliaux. Readings in old and medieval French.

**FRLIT 381 Nineteenth-Century French Women Writers (also WOMNS 381) #**

Spring. 4 credits. Conducted in French. M. C. Vallois.

While situating the works read within their specific historical and literary context, this course will attempt to address two sets of questions: 1) How does the inscription of literature as a Public Institution within a phallogocentric cultural order affect women authors' status and writing strategies? 2) To what extent and at what levels does being a woman inform or shape the text produced? In what ways is literary writing concerned with sexual difference? Writers will include Mme. de Staël, George Sand, Flora Tristan, and Rachilde and others.

**FRLIT 384 Reading Workshop: Prose Narratives**

Fall. 4 credits. Conducted in French. N. Furman.

The aim of this course is two-fold: it seeks, on the one hand, through careful readings of short stories to develop critical insights, methodological rigor, and analytical strategies; and on the other hand, to teach critical thinking and argumentation through short, but frequent, writing assignments.

**FRLIT 395 Camus and His Contemporaries**

Fall. 4 credits. Prerequisite: French 221 or permission of instructor. Conducted in French. S. Tarrow.

The course will examine Camus's major works of fiction together with selections from the work of such writers as J. P. Sartre, Simone de Beauvoir, André Malraux, Albert Memmi, Mohammed Dib, Assia Djebar, and others. In the context of a historical period marked by war—World War II, the Cold War, the Algerian War of Independence—we will discuss some of the debates Camus sparked among his contemporaries in France and North Africa, and examine the ways in which these debates continue to resonate among French intellectuals. Issues to be addressed will include the question of political commitment in literature; colonialism, racism, and their expression in literature; problems of identity, bilingualism, and audience.

**FRLIT 398 Six French Poets**

Spring. 4 credits. J. Ngaté.

This introduction to modern French poetry will focus attention on six major figures: Baudelaire, Mallarmé, Verlaine, Valéry, Ponge, and Césaire. The aim of the course is to

familiarize the student with the principal texts, the major themes, and the dominant forms of the work of these six influential figures. Emphasis will be placed on the close reading and careful analysis of selected poems.

**FRLIT 405 Early Modern Paradise (also SHUM 404 and COML 424) #**

Fall. 4 credits. Conducted in English. M. Doueihy.

For description, see Society for the Humanities 404.

**FRLIT 413 History of Jews in Modern France (also HIST 417 and JWST 446)**

Spring. 4 credits. Prerequisite: permission of instructor. V. Caron.

For description, see History 417.

**FRLIT 415 Giles Deleuze and the Philosophy of the Virtual (also SHUM 417)**

Spring. 3 credits. Conducted in English. E. Kaufman.

For description, see Society for the Humanities 417.

**FRLIT 419-420 Special Topics in French Literature**

419, fall; 420, spring. 2-4 credits each term. Prerequisite: permission of instructor. Staff.

Guided independent study of special topics.

**FRLIT 429-430 Honors Work in French**

429, fall; 430, spring. 8 credits year-long course. R grade fall semester, letter grade spring semester, with permission of the adviser. Open to juniors and seniors. Consult the director of the honors program. J. Ngate.

**FRLIT 435 Aimé Césaire @**

Fall. 4 credits. A reading knowledge of French is required. J. Ngate.

A poet, a playwright, an essayist and a statesman, Aimé Césaire has been a major figure in the French-speaking world and beyond since the end of World War II. This course aims not only to analyze his work but also to explore the nature of his relationships with writers of various literary traditions.

**FRLIT 447 Medieval Literature #**

Spring. 4 credits. Prerequisite: French 221 or permission of instructor. Conducted in English. A. Colby-Hall.

This course is designed to give students facility in reading Old French and an appreciation of two major genres of medieval French literature: the epic and the theater.

**FRLIT 450 Monstrous Forms in Early Modern France (also FRLIT 650) #**

Spring. 4 credits. Conducted in French. K. Long.

In the Early Modern period, issues of gender, race, and species are all subsumed into studies of monstrosity. This course will explore the conjunction between this early "medicalization" of difference and its literary expressions, in the works of Ambroise Paré, Francois Rabelais, Michel de Montaigne and others. Most texts will be in French.

**FRLIT 468 Theater in Seventeenth-Century France (also FRLIT 668) #**

Spring. 4 credits. M. Greenberg.

This course will study the development and flowering of the theater in France in the seventeenth century. We will concentrate on reading the political, social and sexual implications of French Neo-Classicism as a

reflection on and contestation of evolving Absolutism. This will allow us to analyze the insertion of Neo-Classical theater in its own period and to trace the influences of this theater in our contemporary subjective positionings.

**FRLIT 474 Libertines and License (also ENGL 438)**

Spring. 4 credits. R. Parker.

For description, see English 438.

**FRLIT 482 Decadence, Degeneration, and the 19th-Century Imaginary (also COML 463)**

Spring. 4 credits. T. Hope.

For description, see Comparative Literature 463.

**FRLIT 489 The French Lyric #**

Fall. 4 credits. Conducted in French. R. Klein.

This course will read closely a number of lyric poems that cluster around 1870, the year of the Commune. The aim will be to detect the echoes of that revolutionary upheaval, at the origin of modernity, in the formal and thematic details of poems by Mallarmé, Verlaine, Rimbaud. We will read some history of the Commune and some theory of the lyric subject, in order to try to understand, in more general terms, the forms of its evolution. But we will concentrate mostly on reading closely some great poems.

**FRLIT 607-608 Proseminar**

607, fall; 608, spring. 2 credits each term. N. Furman and staff.

Meeting every two weeks, the pro-seminar will be the place for sustained exchanges between graduate students, faculty, and visiting lecturers. Activities will include reading and discussion of seminal texts, chapters from dissertations and works in-progress, articles and essays from visiting lecturers.

**FRLIT 623 Althusser and Lacan (also GERST 686, COML 686, GOVT 679)**

Spring. 4 credits. G. Waite.

For description, see German Studies 686.

**FRLIT 639-640 Special Topics in French Literature**

639, fall; 640, spring. 4 credits each term. Staff.

Guided independent study for graduate students.

**FRLIT 649 Love and Hate in the Middle Ages (also FRLIT 349) #**

Fall. 4 credits. Prerequisite: FRLIT 221 or permission of instructor. Conducted in French. K. Long.

For description, see FRLIT 349.

**FRLIT 650 Monstrous Forms in Early Modern France (also FRLIT 450) #**

Spring. 4 credits. Conducted in French. K. Long.

For description, see FRLIT 450.

**FRLIT 668 Theater in Seventeenth-Century France (also FRLIT 468) #**

Spring. 4 credits. M. Greenberg.

For description, see FRLIT 468.

**Related courses in other departments**

FRDML 200 Intermediate Reading and Writing I

FRDML 203 Intermediate Composition and Writing I

FRDML 213 Intermediate Composition and Conversation II

FRDML 303 Le Français de l'Actualité

FRDML 305 French through film

## Italian

M. Migiel, director of undergraduate studies.

### The Major

Students who wish to major in Italian should choose a faculty member to serve as a major adviser; the general plan and the details of the student's course of study will be worked out in consultation with the adviser. Italian majors are encouraged to take courses in related subjects such as history, art history, music, philosophy, anthropology, classics, linguistics, and other modern languages and literatures. While a major often occupies only the junior and senior years, it is wise for students to seek faculty advice about the major as early as possible.

Students who elect to major in Italian ordinarily should have completed Italian 201 by the end of their sophomore year. Exemptions can be made on the basis of an examination. Students majoring in Italian are expected to become conversant with a fair portion of the masterworks of Italian literature, to acquaint themselves with the outlines of Italian literary history, and to develop some skill in literary analysis. To this end, students will be expected to complete successfully 32 credits of Italian literature courses at the 300 level or higher, with papers to be written in Italian or English. Required courses for the major are ITALL 303, 304, and a course on Dante. ITALA 402, History of the Italian Language, and 403, Linguistic Structure of Italian, may be counted toward the 32 credits required for the major (an introductory linguistics course is a prerequisite of ITALA 402 and 403).

Students majoring in Italian will also be expected to acquire competence in the handling of the language. That competence may be demonstrated by passing an oral and written examination to be arranged with the adviser.

Italian majors will also be required to complete successfully two courses in related fields (for example, Italian history, Italian art history, literary theory).

Italian majors may study in Italy, generally during their junior year, under any of those study-abroad plans organized by American universities that allow the transfer of grades and credits.

To be eligible, students must have completed the first two years of their curriculum requirements and be in good academic standing.

### Literature

Most language courses and Italian linguistics courses are offered by Modern Languages and by Linguistics. Advanced language courses and all literature courses are listed below.

#### ITAL 201-202 Introduction to Italian Literature

3 credits. Prerequisite: permission of instructor. ITALL 201 is not prerequisite to ITALL 202 or ITALL 205. Conducted in Italian. Fall, 202; spring, 201. M. Migiel and staff.

In this course, students will develop their language skills in Italian by reading, discuss-



ing, and writing about short works of fiction (twentieth-century short stories in ITALL 201; twentieth-century novels in ITALL 202).

**ITALL 409 Misogyny and Its Readers**  
(also ITALL 609, COM L 449/649,  
WOMNS 409/609)

Fall. 4 credits. M. Migiel.

Topic for fall 1998: Violence and rhetoric. This seminar will explore the following issues: how violence against women (physical, sexual, and psychological) is represented in literary, visual, and cultural narratives; how violence against women figures in the construction of gender identity; how violence gets encrypted; who speaks for a (silenced) woman; and how readers who attend carefully to literary, visual, and cultural narratives can evaluate the inscriptions of power in them. We will examine, among other things: selections from Ovid's *Metamorphoses* (especially the story of the rape of Philomela) and selections from Livy's *Early History of Rome* (the rape of Lucretia); retellings and rereadings of Ovidian myths (from Italian Renaissance lyric poets, to Shakespeare's *Titus Andronicus* and the *Rape of Lucrece*, to contemporary feminist reappropriations of these stories); novellas from Boccaccio's *Decameron* (1349–51) and Marguerite de Navarre's *Heptameron* (1558); contemporary legal, historical, sociological, psychological, and linguistic studies of violence against women; Liliana Cavani, *The Night Porter* (*Il portiere di notte*, 1974); Dacia Maraini, *Voices* (*Voci*, 1994); the Clarence Thomas-Anita Hill Hearings (1991). The course will be conducted in English, and all texts will be available in English translation.

**ITALL 419–420 Special Topics in Italian Literature**

419, fall; 420, spring. 2–4 credits each term. Prerequisite: permission of instructor. M. Migiel.

Guided independent study of specific topics.

**ITALL 429–430 Honors in Italian Literature**

429 fall; 430, spring. 8 credits. Year-long course, R for fall semester; letter grade for spring semester. Limited to seniors. Prerequisite: permission of instructor. M. Migiel.

**ITALL 609 Misogyny and Its Readers**  
(also Italian 409, COML 449/649,  
WOMNS 409/609)

Fall. 4 credits. M. Migiel.

For description, see Italian Literature 409.

**ITALL 639–640 Special Topics in Italian Literature**

639, fall; 640, spring. 4 credits each term. M. Migiel.

## Romance Studies

The Department of Romance Studies (Mitchell Greenberg, chair) offers courses in French literature, Italian literature, and Spanish literature. In addition, the department's program includes courses in French and Spanish languages, French linguistics, semiotics, and courses in French, Italian, and Hispanic culture. Through its course offerings and opportunities for independent study, the department seeks to encourage study of the interactions of the Romance literatures among themselves, with other literatures, and with other fields of inquiry.

## Literature

**ROMS 358 Literature and Religion: Western Mysticism (also COML 358 and RELST 358)**

4 credits. Spring. Conducted in English. C. Arroyo.

Analysis of some canonical texts of western mysticism towards a systematic view of their common features (a semiotics of the mystic text). Readings include: excerpts from the Bible, Plotinus, Pseudodionysius, Bernard of Clairvaux, Ibn Arabi of Murcia, The Zohar, Meister Eckhart, Teresa of Avila, John of the Cross, and expressions of silence and the ineffable in our times.

## Spanish

E. Acosta-Belén, C. Morón Arroyo, L. Carrillo, D. Castillo, (director of undergraduate studies, spring), M. A. Garcés, D. Ingenschay, J. W. Kronik (director of undergraduate studies, fall), J. E. Paz-Soldán, J. Piedra, J. R. Resina, M. Stycos, J. Tittler.

## The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill in literary and linguistic analysis. Satisfactory completion of the major should enable students to meet language and literature requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, or to satisfy standards for acceptance into the training programs of the government, social agencies, and business concerns. A Spanish major combined with another discipline may also allow a student to undertake preprofessional training for graduate study in law or medicine. Students interested in a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies in Spanish—Professor Kronik—who will admit them to the major and choose an adviser from the Spanish faculty. Spanish majors will then work out a plan of study in consultation with their advisers. Previous training and interests as well as vocational goals will be taken into account when the student's program of courses is determined.

SPANL 201 and SPAND 204 (or equivalent) are prerequisite to entering the major in Spanish. All majors will normally include the following core courses in their programs:

- 1) SPANR 311 and 312
- 2) SPANL 315, 316, and 318 (not necessarily in that order)

Spanish majors have great flexibility in devising their programs of study and areas of concentration. Some typical options of the major are:

- 1) Spanish literature, for which the program of study normally includes at least 20 credits of Spanish literature beyond the core courses. Literature majors are strongly urged to include in their programs courses in all the major periods of Hispanic literature.
- 2) A combination of literature and linguistics.
- 3) Either of the above options with a maximum of three (3) courses at the 300 level or above in other disciplines

counted toward the major. Whichever option a student chooses, he or she is encouraged to enrich the major program by including a variety of courses from related fields or by combining Spanish with related fields such as history, philosophy, sociology, anthropology, art, music, Classics, English, comparative literature, and other foreign languages and literatures. The interdepartmental programs in Latin American Studies and Latino Studies sponsor relevant courses in a variety of areas.

The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.

For the concentration in Spanish linguistics, see Department of Linguistics—Spanish.

**Study abroad in Spain.** Cornell, the University of Michigan, and the University of Pennsylvania cosponsor an academic year in Spain program. Students enrolled in this program spend the first three weeks before the fall semester begins in a residential college located on the campus of the University of Madrid, where they take a course in Spanish language and contemporary society and take advantage of special lectures and field trips in Madrid and Castile. This course carries three credits. In early October the program moves to Seville, where students enroll in as many regular classes at the University of Seville as their language competency and general education permit. Their academic work is supplemented by courses designed explicitly for the program by Seville faculty, as well as a seminar regularly offered by the resident director, who is chosen from the faculty of either Cornell, Michigan or Pennsylvania. The special courses normally include history of art and architecture, Spanish composition and syntax, and modern Spanish history. In Seville students live with selected families in "residencias," or in a few cases in "colegios mayores." Cornell-Michigan-Pennsylvania also maintains a center in Seville, which is used by students for special seminars, tutorials, lectures, and informal gatherings.

Applicants are expected to have at least completed SPAND 204 prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. Students interested in the study abroad program should consult with the Cornell Abroad office for further information.

**Honors.** Honors in Spanish may be achieved by superior students who want to undertake guided independent reading and research in an area of their choice. Students in the senior year select a member of the Spanish faculty to supervise their work and direct the writing of their honors essays (see Spanish 429–430).

**Fees.** Depending on the course, a small fee may be charged for film use or for copies of texts for course work.

## Language

Most language courses and Spanish linguistics courses are offered by the Department of Modern Languages and the Department of Linguistics. Advanced language courses and all literature courses are listed below.

*Note: Students placed in the 200-level courses have the option of taking language and/or literature courses; see listing under SPANL 201 for description of the literature course that may be taken concurrently with SPAND 203–204 (offered by Modern Languages).*

**SPANR 311 Advanced Composition and Conversation**

Fall or spring. 4 credits. Prerequisite: SPAND 204 or 212 or equivalent. M. Stycos and staff.

Advanced language skills, developed through reading, grammar review, and intensive practice in speaking, writing, and translation. Analysis of present-day Spanish usage in a wide variety of oral and written texts.

**SPANR 312 Advanced Composition and Conversation**

Fall or spring. 4 credits. M. Stycos and staff.

Readings and class discussion will focus on the stylistic analysis of modern texts. Increased emphasis, through weekly essays, on students' development of an effective Spanish prose style.

**SPANR 366 Spanish in the US (also LING 366 and LSP 366)**

Spring. 4 credits. M. Suñer. For description, see Linguistics 366.

**Literature****SPANL 201 Introduction to Hispanic Literature @**

Fall or spring. 3 credits. Prerequisite: qualification in Spanish or permission of instructor. The course is divided into small sections and is conducted mainly in Spanish. (Fulfills both the language proficiency requirement and the humanities distribution requirement. The literature course that normally follows SPANL 201 is either 316 or 318.) J. Piedra and staff.

An intermediate course designed to improve Spanish skills through reading and discussion of contemporary literary works from Spain and Spanish America. Emphasis on the development of fluency in reading and of critical and analytical abilities. The cultural, sociological, and aesthetic implications of texts by authors such as Borges, Cortázar, Fuentes, García Márquez, García Lorca, and Cela are considered.

**SPANL 246 Contemporary Narratives by Latina Writers (also LSP 246)**

Fall. 3 credits. L. Carrillo.

This course offers a survey of narratives by representative Latina writers of various Latino ethnic groups in the United States including Chicana, Chilean, Cuban, Dominican, and Puerto Rican. We will investigate the parallel development of a Latina perspective on personal, social, and cultural issues alongside that of the U.S. ethnic liberation/revitalization movements of the 1960s through to contemporary feminist activism and women of color movements. We will investigate these works as artistic attempts to deal with such issues as culture, language and bilingualism, family, gender, sexuality, and domesticity. We will account for regional distinctions and contributions. Readings will include works by Julia Alvarez, Gloria Anzaldúa, Elena Castedo, Ana Castillo, Denise Chávez, Sandra Cisneros, Judith Ortiz Cofer, Cristina García, Nora Glickman, Nicholasa Mohr, Cherrie Moraga, Achy Obejas, Esmeralda Santiago, Ana Lydia Vega, and Helena María Viramontes.

**SPANL 301 Hispanic Theater Production**

Fall or spring. 1-2 credits. S-U only. Fall, A. Echevarría; spring, D. Castillo.

Students develop a specific dramatic text for full-scale production. The course will involve selection of an appropriate text, close analysis

of the literary aspects of the play, and group evaluation of its representational value and effectiveness. All students will be involved in some aspect of production and will write a final paper as a course requirement. Credit will be variable depending upon the student's role in play production: a minimum of 50 hours of work is required for one credit; a maximum of two credits will be awarded for 100 hours or more of work.

**SPANL 313 Approaches to Spanish Culture**

Spring. 4 credits. Conducted in Spanish. C. Arroyo.

An examination of various aspects of the history and culture of Spain. Topics include: native and foreign interpretations of Spain; the origins of ethnic and linguistic differences; post-Civil War politics; nationalism and regionalism; contemporary Spanish society; the role of women; education; religion; literature, art and leisure activities.

**SPANL 315 Renaissance Hispanisms: Spain and the Americas #**

Spring. 4 credits. Conducted in Spanish. Prerequisite: SPANL 316 or SPANL 318. M. A. Garcés.

In Spain, the cultural revolution known as the Renaissance produced a glittering array of artistic works, which gave rise to the term Golden Age. There was a "darker side" to the Renaissance, however, which juxtaposed the conquest of America with the establishment of the Inquisition and the expulsion of the Jews and later, of the *Moriscos*. The tale of these relations of exclusion and fascination, of domination and communication with the *other* is recapitulated by the literature of the period. Texts include Columbus, Cabeza de Vaca, *Lazarillo*, Garcilaso de la Vega, San Juan de la Cruz, Cervantes, María de Zayas, Lope de Vega, Calderón, and others.

**Note:** SPANL 316 and 318 can be taken in any order. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor.

**SPANL 316 Readings in Modern Spanish Literature**

Fall or spring. 4 credits. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor.

Taught in Spanish. Fall: J. Kronik or J. R. Resina; spring: D. Ingenschay. Readings and discussion of representative texts from Spain from the romantic period to the present. Bécquer, Galdós, Unamuno, García Lorca, Cela, and others.

**SPANL 318 Readings in Spanish-American Literature @**

Fall or spring. 4 credits. Fall: J. E. Paz-Soldán or M. Stycos; spring: J. E. Paz-Soldán, M. Stycos and staff.

Readings and discussion of representative texts of the nineteenth and twentieth centuries from Spanish America: Darío, Borges, Valenzuela, Cortázar, García Márquez, and others.

**Note:** The prerequisite for the following courses, unless otherwise indicated, is SPANL 315, 316, or 318 or permission of instructor.

**SPANL 320 Perspectives on Latin America @**

Spring. 3 credits. Conducted in English. D. Castillo.

This interdisciplinary, co-taught course will be offered every semester through the Latin

American Studies Program. It is highly recommended for Latin American Studies Concentrators. Topics will vary by semester, but readings will always focus on current research in various disciplines and regions of Latin America. The range of issues addressed will include the economic, social, cultural, and political trends and transitions in the area. In the weekly meetings, instructors and guest lecturers will facilitate student discussions. Students are required to participate in all class discussions and write one research paper in their chosen focus area.

**SPANL 321 The Puerto Rican Experience in the United States (also LSP 321)**

Fall. 4 credits. Conducted in English. E. Acosta-Belén.

An introduction to the historical and cultural experience of Puerto Rican migrants to the United States from the nineteenth century to the present. Special emphasis on migration patterns, changing demographics, national identity debates, and the cultural expressions of the Puerto Rican diaspora. Reading knowledge of Spanish is desirable.

**SPANL 329 Between Fascination and Derision: The Dialectic of Catholic Religion in Spanish Drama (from Valle-Inclán to Almodóvar)**

Spring. 4 credits. Conducted in Spanish. D. Ingenschay.

More clearly than any other, Spanish drama is replete with religious themes. When dramatic authors of the Franco era revolt against the patronizing influence of both Church and dictatorship, they do so with a mixture of fascination and derision (or, in Bataille's terms, of the holy and the profane), a mixture already apparent in the iconoclastic Avant-Garde of the 20s (Valle-Inclán, Lorca, Buñuel). The course begins with a view of the religious 'dialectics' in Valle-Inclán's "Divinas palabras" and Lorca's "El público", focusing next on the religious ethics and aesthetics in the drama of the Francoist and post-Francoist era, ranging from exile and underground theater to the "crazy years" of "transición" and "movida" to the "post-movida" era of the 90s.

**SPANL 332 The Modern Drama in Spanish America @**

Fall. 4 credits. Conducted in Spanish. J. Kronik.

Representative plays of recent decades from several Spanish American countries, including Puerto Rican and Latino writers, will be read closely and discussed. The tensions between vanguard experimentation and the expression of a Spanish American social identity will be studied in the light of modern currents such as the epic theater, the theater of the absurd, the theater of cruelty, and metatheater.

**SPANL 350 Literature of Conquest (also SPANL 450) @ #**

Spring. 4 credits. M. A. Garcés.

This course examines the cultural and psychological impact of the "Discovery" on the literatures of the Old and the New World. In a voyage that takes us from the Caribbean to the *mesetas* of Ancient Mexico and the Andean regions of South America, we will explore the formation of an American discourse through a close reading of sixteenth- and seventeenth-century European and Amerindian texts. Reading selections may be drawn from Christopher Columbus, Pedro Mártir, Hernán Cortés, Bernal Díaz, Michel de Montaigne, Aztec and Maya Testimonies on the Conquest, Francisco de

Xerez, Juan de Betanzos, Tito Cusi Yupangui, and Inca Garcilaso de la Vega, among others.

The course may include a one credit optional study-trip to Peru, during which we will study various accounts of the traumatic encounter between Inkas and Spaniards *in situ*. To complement our vision of the Inka and Colonial Andean worlds, we will visit Cusco and Machu Picchu, as well as Inka and pre-Inka ruins, colonial churches and convents, museums and private collections of pre-Columbian art. Early registration for the course and study-trip recommended.

**SPANL 363 The European Novel (also Comparative Literature 363)**

Fall. 4 credits. C. M. Arroyo.  
For description, see COM L 363.

**SPANL 394 Trans-Atlantic Renaissance (also COM L 394) @ #**

Spring. 4 credits. J. Piedra.  
A comparative look, in English, at Renaissance masterpieces from Europe and Spanish America, according to the following themes: Mapping Strategies (Vespucci, Columbus); Epic Proportions (Camoens, Silvestre de Balboa); Conciliatory Manners (Castiglione, Inca Garcilaso); Suspicious Natures (Lope, Bernal); Cultural Imperatives (Montaigne, Torquemada); Dictatorial Blueprints (Machiavelli, Cortes); Shipwrecking States (Shakespeare, Sigüenza y Góngora).

**SPANL 395 The Modern/Contemporary Andean Literature @**

Fall. 4 credits. Conducted in Spanish. J. Paz-Soldán.  
This course examines the literary production of the Andean region (Peru, Bolivia, and Ecuador). Taking as our point of departure the late nineteenth-century, we will examine issues such as the sociocultural heterogeneity of the region, which challenges the idea of a unified, modern nation-state; the tension of interethnic relations, and the emergence of *indigenist* cultural and political movements; the gendered violence of a male-dominated society, and contemporary challenges to this hegemonic structure. Although we will focus on novels, we will also see poems, essays and short stories. Authors to be studied include: Matto, Alcides and Joé María Arguedas, Icaza, Vargas Llosa, Bayly.

**SPANL 419-420 Special Topics in Hispanic Literature**

419, fall; 420, spring. 2-4 credits each term. Prerequisite: permission of instructor. Staff.  
Guided independent study of specific topics. For undergraduates interested in special problems not covered in courses.

**SPANL 429-430 Honors Work in Hispanic Literature**

429, fall; 430, spring. 8 credits. Year-long course, R grade fall semester, letter grade spring semester. Limited to seniors. Prerequisite: permission of instructor. Fall, J. Kronik; spring, D. Castillo.

**SPANL 440 Medieval Spanish Literature #**

Fall. 4 credits. Conducted in Spanish. C. Arroyo.  
Reading from *Mío Cid* to *Celestina*. Emphasis on concepts (learned vs. popular, topos vs. personalism, pro-anti-feminism, courtly love) in European perspective. Cultural distance and "assimilation" through reading.

**SPANL 450 Literature of Conquest (also SPANL 350) @ #**

Spring. 4 credits. M. A. Garcés.  
For description, see SPANL 350.

**SPANL 482 U.S. Latino Culture and Literature (also LSP 482)**

Fall. 4 credits. Conducted in Spanish. E. Acosta-Belén.  
A study of the development of U.S. Latino literature and culture from colonial times to the present. Particular attention will be given to how gender, race, ethnicity, and class interact in the formation of individual, panethnic, and transnational Latino identities. Major writings and other forms of artistic expression by Cuban, Dominican, Mexican, and Puerto Rican authors will be discussed as well as issues of Spanish/English language use. Knowledge of Spanish required.

**SPANL 498 Mallarmé in Latin America @**

Fall. 4 credits. The course will be taught in English; readings and quoting in class will be in Spanish (or in English, when translations are available). Reading knowledge of Spanish, but not of French or Portuguese, is required. J. Piedra.  
This course deals with the Latin American idealization, politization and reactions against Mallarmé's theory and practice of poetry. Samples from his work will serve as background to study matching aspects of the poetry of Leopoldo Lugones, Vicente Huidobro, César Vallejo, Gabriela Mistral, Juana de Ibarbourou, Alfonsina Storni, Nicolas Guillén, Clara Lair, Octavio Paz, Severo Sarduy, as well as Brazilian concrete poets.

**SPANL 625 Latin American Literature/ Mass Media @**

Spring. 4 credits. Conducted in Spanish. J. Paz-Soldán.  
This course examines Latin American literature in the context of the visual and auditory culture of the second-half of the twentieth century, in which mass media such as photography and phonography and film have threatened writing's "representational privilege" as a technology of information processing and storage. We will analyze how literature has been able to sustain its visibility in this competitive media ecology, and how it is a wonderful tool to represent its own media multiplicity; the power of mass media fantasies to modify the individual's subjectivity, and of the visual image to manipulate reality; the relationship between literature and popular culture and the marketplace; and the young writers' unrelenting engagement with the new technologies of the information age. We will read authors such as Puig, Cortázar, Vargas Llosa, Cabrera Infante, Fuguet, and critics such as Sarlo, Monsiváis, García Canclini, Nelly Richard, Benjamin, McLuhan, Baudrillard, Kittler.

**SPANL 639-640 Special Topics in Hispanic Literature**

639, fall; 640, spring. 2-4 credits each term. Staff.

**SPANL 696 The Literary Construction of the City**

Fall. 4 credits. Conducted in Spanish. J. R. Resina.  
The seminar will be geared towards research and discussion around themes related to 'reading' the city. Semiological and sociological approaches to the urban experience will be taken into consideration, but also, and

fundamentally, the literary constitution of the city. A set of texts will constitute the core of the discussions, but each student will be responsible for designing a research project on a city or city aspect, and will be able to incorporate a text or texts to the common reading list. The geographical emphasis will be on Spanish and European cities, but there will be room for inclusion of study cases from other geographies in the student proposals.

**RUMANIAN**

See Language Courses under Modern Languages.

**RUSSIAN**

P. Carden, director of undergraduate studies [literature], 235 Goldwin Smith Hall, 255-8350; E. W. Browne, G. Gibian, N. Pollak, S. Senderovich, G. Shapiro

**The Russian Major**

Russian majors study Russian language, literature, and linguistics, emphasizing their specific interests. It is desirable, although not necessary, for prospective majors to complete Russian 121-122, 201-202, and 203-204 as freshmen and sophomores, since these courses are prerequisites to most of the junior and senior courses that count toward the major. Students may be admitted to the major upon satisfactory completion of Russian 122 or the equivalent. Students who elect to major in Russian should consult Professor Carden as soon as possible. For a major in Russian, students will be required to complete (1) Russian 301-302 or 303-304 or the equivalent, and (2) 18 credits from 300- and 400-level literature and linguistics courses, of which 12 credits must be in literature in the original Russian.

Certain courses may, with the permission of the instructor, be taken for one additional hour's credit. Such courses will involve a one-hour section each week with work in the Russian language. These courses count one hour each of credit toward the 12 courses of Russian literature in the original language required for the major.

**Study Abroad**

Cornell is an affiliated institution with the Council on International Educational Exchange program for Russian language study at St. Petersburg State University. Cornell students also frequently attend the American Council of Teachers of Russian program in Moscow and other Russian language programs. Opportunities are available for study during the summer, a single semester, or the full year. Further information is available from W. Browne, in the Department of Linguistics.

**Honors.** Students taking honors in Russian undertake individual reading and research and write an honors essay.

**Fees.** Depending on the course, a small fee may be charged for photocopied texts for course work.

**Freshman writing seminar requirement.** The following courses will satisfy the freshman writing seminar requirement: Russian 103 and 104.

## Russian and East European Studies Major

See "Special Programs and Interdisciplinary Studies," which follows the department listings.

### Russian Literature

P. Carden (director of undergraduate studies, 235 Goldwin Smith Hall, 255-8350), G. Gibian, N. Pollak, S. Senderovich, G. Shapiro.

The Department of Russian Literature offers a variety of courses: some with readings in English translation, others in the original Russian, or both. The connection between Russian history, society, and literature is particularly close, so instruction and discussion in class often include a variety of topics, such as culture and intellectual history, as well as literature. Several courses are interdisciplinary, cosponsored with the departments of History, Economics, Government, Comparative Literature, etc. Students interested in majoring in Russian are strongly urged to take Russian 121-122 as soon as possible, preferably in their first year, or by their second at the latest. Russian 203-204, offered by the Department of Modern Languages, and Russian 201-202, offered by the Department of Russian Literature, complete basic language instruction and introduce students to literature. A further sequence of literature courses in Russian follows Russian 202.

For further information about courses and majors, see Modern Languages.

#### **RUSSL 103 Freshman Writing Seminar: Classics of Russian Thought and Literature**

Fall or spring. 3 credits. D. Anderson. Russian society has always seen its literature as having a mission important to the development of the nation. In this course we will examine Russian literature as it participates in the debate, whither Russia? We will look in particular at the conflict between the Slavophiles, those who thought Russia had its own unique destiny, and the Westernizers, those who thought Russia should look to the West for a model in its development. We will be reading such Russian authors as Turgenev, Dostoevsky, Herzen, and Solzhenitsyn in English translation. The course will examine the rhetorical means each author uses to make his argument. All reading is in English translation.

#### **RUSSL 104 Freshman Writing Seminar: Nineteenth-Century Russian Literary Masterpieces**

Fall or spring. 3 credits. Fall, N. Pollak; spring, P. Carden. This course will introduce students to a broad selection of the major short works of the Russian literary tradition. Our emphasis will be on what makes each work interesting as writing, what themes have been particularly interesting to Russians, and how we recognize the distinctive voice of each of the writers we are studying. Among the authors read are Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. All reading is in English translation.

#### **[RUSSL 105 Freshman Writing Seminar: Twentieth-Century Russian Literary Masterpieces**

Fall. 3 credits. Not offered 1998-99. Staff. We will read and write about a selection of works from the major Russian literary movements of the twentieth century. The course will concentrate in part on important literary responses to the first Russian Revolution and the society it created. Authors to be read include Zamyatin, Olesha, Zoshchenko and Vladimov. Readings in English translation.]

#### **RUSSL 201 Readings in Russian Literature #**

Fall. 3 credits. [202 not offered spring 1999.] Prerequisites: qualification in Russian. Open to freshmen. N. Pollak. These courses are designed as the initial courses students take after qualification in Russian and are conducted mainly in Russian. Considerable guidance is provided, however, and there is no presumption of fluency. The goal of the course is to introduce students to Russian literature in the original, to sample differing literary styles, and to accomplish both with minimal recourse to English in class. Several short papers in Russian and English will be assigned. Readings from nineteenth- and twentieth-century masters of prose and verse such as Pushkin, Lermontov, Tiutchev, Tolstoy, Chekhov, Babel, and Zoshchenko.

#### **[RUSSL 207 Themes from Russian Culture #**

Spring. 3 credits. Not offered 1998-99. G. Shapiro. This course is based on lectures, discussions, and audio-visual presentations (slides, tapes, films). It includes within its scope various aspects of Russian culture such as literature, art, music, religion, philosophy, and social thought from its very beginnings through the eighteenth century. The course is designed to give undergraduates a broad familiarity with the cultural traditions of the country which plays a major role in the world today. Russian culture will be presented as part of Western civilization with attention given to its distinctive character. The basic texts are literary works of moderate length in English translation.]

#### **[RUSSL 208 Themes from Russian Culture II**

Spring. 3 credits. Not offered 1998-99. G. Shapiro. This course is based on lectures, discussions, and audiovisual presentations (slides, tapes, films). It includes various aspects of Russian culture such as literature, art, music, religion, philosophy, and social thought over the last two hundred years. The course is designed to give undergraduates a broad familiarity with the cultural traditions of the country that plays a major role in the world today. Russian culture will be presented as part of Western civilization with attention given to its distinctive character. The basic texts are literary works of moderate length in English translation.]

#### **RUSSL 311 Modern European Literature and Culture (also COMP L 311, ROM ST 311)**

Spring. 4 credits. Core course for European Studies concentration; no prerequisites. G. Gibian. For course description, please see Comparative Literature 311.

#### **[RUSSL 330 Understanding Russia Today (also Govt 357)**

Fall. 4 credits. Not offered 1998-99. G. Gibian and guest speakers. An interdisciplinary inquiry into Russian society and its history, designed as an introduction for students not majoring in Russian studies, also a synthesis for those who are studying various aspects of Russia in separate disciplines. Organized into a variety of approaches to Russian language, culture, history, and literature. It aims to teach both basic information and different ways of interpreting that information. Topics will include: the land and the people; doing business in Russia; literary traditions and revolts; Russian national identity; nationalism; persistent cultural traits; religion, history; politics and government; relations with other nations, inside Russia and outside; Jews and Russians; folklore; social matters, customs, values; position of women; education; music, architecture; agriculture and industry; Russian maximalism; regionalism; the ecology; film, TV, theatre, journalism.]

#### **RUSSL 331 Introduction to Russian Poetry #**

Fall. 4 credits. Prerequisites: Russian 202 or equivalent and permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students. S. Senderovich.

A survey of Russian poetry with primary emphasis on the analysis of individual poems by major poets.

#### **[RUSSL 332 Russian Drama and Theatre (also Theatr 322)**

Fall. 4 credits. Not offered 1998-99. S. Senderovich. Selected topics. Discussion of a number of the most representative Russian plays of the nineteenth and twentieth centuries in chronological order. Introductions to the historical period, cultural atmosphere, literary trends, and crucial moments in the history of the Russian theater will be especially emphasized. Among the works we will be studying will be Gogol's *Inspector General*, Ostrovsky's *The Storm*, and Chekhov's *The Cherry Orchard*. All readings will be in English translation. Additional assignments in critical literature will be made for graduate students.]

#### **[RUSSL 333 Twentieth-Century Russian Poetry**

Spring. 4 credits. Not offered 1998-99. N. Pollak. Close readings of lyrics by major twentieth-century poets. All reading is in Russian. Geared towards undergraduates.]

#### **[RUSSL 334 The Russian Short Story #**

Fall. 4 credits. Prerequisites: Russian 202 or equivalent and permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students. Not offered 1998-99. N. Pollak. A survey of two centuries of Russian story telling. Emphasis on the analysis of individual stories by major writers, on narrative structure, and on related landmarks of Russian literary criticism.]



**[RUSSL 350 Education and the Philosophical Fantasies]**

Spring. 4 credits. Not offered 1998–99.  
P. Carden.

A major philosophical tradition has conceived of education as encompassing the whole of our lives. What we should do or be is seen as the result of every choice we make. The whole of our human context is understood as a school in which we form ourselves. This all-encompassing vision of education has been embodied in the works of the great philosopher-fantastists who use the forms of fiction to explore fundamental issues of education. In this course we will examine several key philosophical fantasies, among them Plato's *Republic*, Rousseau's *Emile*, and Tolstoy's *War and Peace*. Our aim will be to understand how the discourse on education became a central part of our Western tradition.]

**[RUSSL 367 The Russian Novel (also Comparative Literature 367) #]**

Fall. 4 credits. Also open to graduate students. Special discussion section for students who read Russian. G. Gibian. Sentimentalism, romanticism, realism, modernism. Novels and short stories by Gogol, Turgenev, Tolstoy, Dostoevsky, Chekhov, and others. Readings in English translation.

**[RUSSL 368 Russian Literature from 1917 to the Present]**

Spring. 4 credits. Also open to graduate students. No prerequisites. There will be a special section for students who read Russian. G. Gibian. In translation. A survey of Russian literature focusing on the most important writers. Among the themes to be explored will be Russian Modernism, social command, socialist realism, the Thaw, dissident and emigre literature, post-modernism. Writers include Blok, Mayakovsky, Babel, Olesha, Platonov, Pasternak, Nabokov, Solzhenitsyn, the two Erofeevs, and contemporary women poets and short story writers.

**[RUSSL 369 Dostoevsky #]**

Fall. 4 credits. Not offered 1998–99.]

**[RUSSL 373 Chekhov in the Context of Contemporary European Literature and Art (also Comparative Literature 375) #]**

Fall. 4 credits. S. Senderovich. Reading and discussion of Anton Chekhov's short stories in the context of the European art of the short story and painting of that era. The course is designed for nonspecialists as well as literature majors. All reading is in English translation.

**[RUSSL 377 Baltic Literature (also German Studies 377)]**

Spring. 4 credits. In English translation. I. Ezerzailis. For course description, please see German Studies 377.

**[RUSSL 379 The Russian Connection (also Comparative Literature 379) #]**

Spring. 4 credits. Not offered 1998–99. P. Carden. Our topic will be the development of a poetics of introspection in European prose in the course of the 19th century, culminating in two major Russian novels: Tolstoy's *War and Peace* and Dostoevsky's *The Idiot*. Among other works we will read: Constant's *Adolphe*, Stendhal's *Charterhouse of Parma*, and several short works relevant to the theme.]

**[RUSSL 384 Dialogue in/as Text (also Comparative Literature 384)]**

Spring. 4 credits. Not offered 1998–99. P. Carden.

An examination of the principle of dialogue and dialogism as it appears in fictional discourse. Using the theories of Mikhail Bakhtin as a point of departure, we will examine the use of dialogue as a form of discourse beginning with Plato's *Phaedrus*. Dostoevsky's novels *Notes from Underground*, *The Possessed*, and *The Brothers Karamazov* will be discussed as dialogic, or polyphonic forms of discourse. Finally, we will discuss selected works of Gide, Sartre and Camus, who acknowledged their debt to Dostoevsky, to see if they are indeed polyphonic in structure.]

**[RUSSL 385 Reading Nabokov (also Comparative Literature 385 and English 379)]**

Fall. 4 credits. G. Shapiro. This course offers an exciting trip to the intricate world of Nabokovian fiction. After establishing himself in Europe as a distinguished Russian writer, Nabokov, at the outbreak of WWII, came to the United States where he reestablished himself, this time as an American writer of world renown. In our analysis of the Nabokovian artistic universe, we shall focus on his two splendid achievements as a Russian writer, *The Defense* (1930) and *Despair* (1934) (both in their English form), and then examine the two widely read novels that he wrote in Ithaca while teaching literature at Cornell—*Lolita* (1955) and *Invitation to a Beheading* (1957).

**[RUSSL 389 Contemporary Literature in Central and East Europe (also Comparative Literature 389)]**

Fall. 4 credits. G. Gibian. The course this year will study developments in literature (and to some extent in other areas of culture) in Hungary, Poland, Slovakia, and the Czech Republic in the most recent periods. We shall focus on novels and short stories, but some consideration will also be given to drama and poetry. No knowledge of Eastern European languages is required. The reading will be done in English translation.

**[RUSSL 393 Honors Essay Tutorial]**

Fall and spring. 8 credits. Must be taken in two consecutive semesters in senior year. Credit for the first semester will be awarded upon completion of second semester. For information, please see Director of Undergraduate Studies.

**[RUSSL 404 History and Nationality in Russia and Eastern Europe (also S Hum 404) #]**

Fall. 3 credits. Not offered 1998–99. G. Gibian. Ethnicity and nationality appear as the main forces behind the recent dramatic changes in Eastern Europe. The seminar addresses these issues in Russia, Czech Republic, and elsewhere, mainly from a literary perspective and also in the context of rising ethnic and national consciousness throughout the world.]

**[RUSSL 409 Russian Stylistics]**

Spring. 4 credits. Also open to graduate students. Prerequisite: three years of Russian. S. Senderovich. A few steps beyond normative grammar. Introduction to the subtleties of idiomatic Russian on the levels of morphology, syntax, vocabulary, and phraseology. Introduction to the genres of live colloquial and written

language. Development of writing skills through short assignments and their analyses. First notions of literary stylistics and their practical application.

**[RUSSL 425 Vladimir Nabokov vs. Jean-Paul Sartre (also COMP L 445)]**

Spring. 4 credits. S. Senderovich. Jean-Paul Sartre reviewed Nabokov's *Despair* in 1938. Ten years later Nabokov returned the favor in his review of the English translation of Sartre's *La Nausée*. The apparent tension between the two celebrated men of European letters of the twentieth century allows us to look at the works of both through the eyes of the other, to go into the problems of Existentialist philosophy, into Nabokov's brand of it, and into responses to Sartre in Nabokov's works. The latter gives an excellent yet unexplored approach to the poetic world of Vladimir Nabokov. Nabokov's major response to Sartre occurred in the novel *Invitation to a Beheading* written in Ithaca and largely about Cornell.

**[RUSSL 427 Russian Formalism (also Comparative Literature 427)]**

Fall. 4 credits. Not offered 1998–99. N. Pollak. This is a course on Russian Formalism, a trend in literary interpretation that flourished in the 1910s and the first part of the 1920s. We will read the writings of such scholars as Tynianov, Eikhenbaum, Shklovsky, and Jakobson, as well as the works they studied. The course provides a historical examination of a school that gave rise to some of the most important movements in twentieth-century Western criticism—and in other disciplines, such as linguistics and anthropology. The course also provides both a look at classics of Russian prose and an approach to literature that has something to offer readers today. No knowledge of Russian is required.]

**[RUSSL 430 Practice in Translation]**

Spring. 4 credits. Prerequisites: proficiency in Russian or approval of instructors. Not offered 1998–99. W. Browne and S. Senderovich. A practical workshop in translation: documents, scholarly papers, literary works (prose and poetry). Translation mostly from Russian to English, partly from English to Russian. Attention to problems and development of skills.]

**[RUSSL 431 Contemporary Russian Prose]**

Spring. 4 credits. Prerequisites: Russian 301–302 or 303–304, and permission of instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major. Graduate students may audit the course. Not offered 1998–99. Staff. This course is designed to acquaint students with the way Russian prose has developed during the past forty years. Although the emphasis will be on comprehension of the text, we will also discuss literary structure, modern literary history, social and political problems, and the ways in which life in Russia is reflected in its literature. Authors to be read include Viktor Nekrasov, Yuri Kazakov, Alexander Solzhenitsyn, Varlam Shalamov, Abram Tertz (Andrei Sinyavsky), Vasili Axyonov, and Tatyana Tolstaya. This course is specifically intended for third- and fourth-year Russian majors.]

**[RUSSL 432 Pushkin #**

Spring. 4 credits. Prerequisites: Russian 202 or equivalent, and permission of instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students. Not offered 1998-99. S. Senderovich.

Reading in the original language and discussion of selected works by Pushkin: lyrics, narrative poems, and *Eugene Onegin*.]

**[RUSSL 441 Bakhtin as Reader (also RUSSL 641, COMPL 641)**

Spring. 4 credits. Open to undergraduates with permission of instructor. Not offered 1998-99. P. Carden.

The course will investigate the literary and cultural theories of Mikhail Bakhtin, focusing in particular on his interpretations of literary texts. We will read a representative selection of works by Bakhtin covering the chronological development of his ideas. Each member of the class will select one or more of the literary texts commented on by Bakhtin as an occasion for independent work. A reading knowledge of Russian is not required, although Russian readers may have alternate assignments in the language.]

**[RUSSL 445 Batiushkov and Pasternak**

Fall. 4 credits. Prerequisites: at least one 300-level course in Russian literature in the original, or permission of the instructor. Not offered 1998-99. N. Pollak.

A study of the works of Konstantin Batiushkov (b. 1787) and Boris Pasternak (b. 1890), two poets who have been described as innovators in Russian poetic language. We will examine the poetry (and prose) of these poets and some of their contemporaries, with a view to exploring their parallel roles in two ages of poetry a century apart.]

**[RUSSL 460 Short Works of Tolstoy and Dostoevsky**

Spring. 4 credits. Not offered 1998-99. G. Gibian.

Readings in Russian and in translation. Open to graduate students.]

**RUSSL 491 Reading Course: Russian Literature in the Original Language**

Fall or spring. 1 credit each term. Prerequisite: permission of instructor. Staff.

This course is to be taken in conjunction with any Russian literature course in English translation. Students will receive one credit for reading and discussing works in Russian in addition to their normal course work.

**RUSSL 492 Supervised Reading in Russian Literature**

Fall or spring. 1-4 credits each term. Prerequisite: permission of instructor. Staff.

**RUSSL 499 The Avant-Garde in Russian Literature and the Arts**

Spring. 4 credits. Open to any student who has completed a second-year course in Russian, or who has equivalent reading skills in Russian. May be used in satisfaction of the 12 hours of reading required for the Russian major. P. Carden.

The first decades of the twentieth century was perhaps the richest period ever in Russian literature and the arts. It begins with the brilliant experimentation in poetry and prose of Andrei Bely, Blok, Remizov and others. It continues with the breakthroughs in painting and sculpture of Malevich, Goncharova,

Tatlin, etc. In the second decade the rambunctious Futurists take over in literature and establish a compact with theater and the visual arts in which all the art forms break down the barriers to produce a new kind of art. During this period Russian artists in every medium were on the cutting edge of the European art scene. After the Revolution Russian artists and writers of the avant-garde continued their dominance for a time, now including the developing medium of film.

In this course we will read representative Russian texts by the major authors of the period and we will also investigate developments in the theater, the visual arts and film.

**Graduate Seminars****[RUSSL 603 Graduate Seminar: Neglected Masterpieces of Short Russian Prose**

Spring. 4 credits. Not offered 1998-99. G. Gibian.

Nineteenth- and twentieth-century works chosen according to the needs of the students enrolled. Stress on skills useful in teaching Russian literature.]

**RUSSL 611 Supervised Reading and Research**

Fall or spring. 2-4 credits. Prerequisite: permission of the department. Staff.

**[RUSSL 617-618 Russian Stylistics I and II**

Not offered 1998-99.]

**[RUSSL 619 Seventeenth-Century Russian Literature**

Fall. 4 credits. Not offered 1998-99. G. Shapiro.

Seventeenth-century Russian literature is often studied together with Medieval literature. Is such an arrangement justified, or does seventeenth-century literature have its own problematic that makes it worth studying separately? In scholarship the seventeenth century is referred to as the Age of Baroque. Did Muscovite Russia experience its own Baroque, and, if so, what are its unique features? These and other important issues will be addressed in the seminar. In the course of the seminar a variety of concepts, genres, and themes characteristic for the epoch will be discussed. We will read the works of such authors as Simeon Polotsky, Silvester Medvedev, Karion Istomin, and the archpriest Avvakum.]

**[RUSSL 620 Twentieth-Century Russian Poetry**

Spring. 4 credits. Open to advanced undergraduates with permission of instructor. Not offered 1998-99. N. Pollak.

An in-depth study of the writings of selected twentieth-century poets. Authors may include Blok, Mandelstam, Pasternak, Tsvetayeva, and Khlebnikov.]

**[RUSSL 621 Old Russian Literature**

Spring. 4 credits. Not offered 1998-99. S. Senderovich.

A survey.]

**[RUSSL 622 Eighteenth-Century Literature**

Spring. 4 credits. Not offered 1998-99. S. Senderovich.

Introduction to the first century of modern Russian literature. Cultural identity of the age:

Baroque, Neo-Classicism, Enlightenment, Sentimentalism. Reading of representative texts of the major writers of the century: Trediakovsky, Lomonosov, Sumarokov, Novikov, Karamzin, etc. Main connections with nineteenth-century literature: roots, evolution, intertextuality.]

**[RUSSL 624 Russian Romanticism**

Spring. 4 credits. Taught in Russian. Not offered 1998-99. S. Senderovich.

A survey of concepts, themes, genres, and main individual contributions in Russian literature of the Age of Romanticism. The Age of Romanticism encompasses the first four decades of the nineteenth century. Zhukovsky, Batiushkov, Pushkin, Baratynsky, Gogol, and Lermontov are the major representatives of this style and the most important period of Russian literature. The emphasis is on poetry, its historical and theoretical problems. It was, above all, the golden age of Russian poetry, which prepared and deeply influenced the following age of great Russian prose. Turgenev, Tolstoy, Dostoevsky, and Chekhov are full of allusions to the texts of the golden age and cannot be properly understood without it.]

**[RUSSL 625 Russian Realism**

Fall. 4 credits. Not offered 1998-99. P. Carden.

A study of the development of psychological realism in Russian prose of the nineteenth century, with some attention to the poetic tradition. In addition to reading representative works, we will pay attention to the historical background of the period. We will approach the works through the critical writings of several important theorists, in particular those of Lydia Ginzburg.]

**[RUSSL 626 The Tradition of Russian Poetry**

Spring. 4 credits. Not offered 1998-99. N. Pollak.

This course will examine a selection of poems that have been particularly important for the tradition of Russian literature in the nineteenth and twentieth centuries. Our focus will include critical and literary responses to these poems as well as close readings.]

**[RUSSL 627 Russian Formalism (also Comparative Literature 627)**

Spring. 4 credits. Not offered 1998-99. N. Pollak.

See RussL 427 for course description.]

**[RUSSL 630 Gogol**

Fall. 4 credits. Taught in Russian. Not offered 1998-99. G. Shapiro.

Gogol's artistic career from his "Ukrainian" cycles to *Dead Souls*. We will examine representative works from each of the major divisions of Gogol's early work, in particular from his cycles *Evenings on a Farm near Dikanka* and *Mirgorod*, and will trace the writer's development toward his magnum opus, *Dead Souls*. Although some of the readings will be done in English to enable the class to cover a significant amount of material, the class work will be focused on close analysis of the Russian text.]

**[RUSSL 641 Bakhtin as Reader (also COMPL 641)**

Spring. 4 credits. Not offered 1998-99. P. Carden.]

**[RUSSL 650 Russian Intellectual History]**

Spring. 4 credits. Not offered 1998–99.  
S. Senderovich.

Nineteenth- and twentieth-century selected topics. Taught mostly in English.]

**[RUSSL 669 Dostoevsky]**

Fall. Also open to advanced undergraduates. Not offered 1998–99. G. Gibian and guest lecturers.

Study of representative works from various periods of Dostoevsky's life, including some articles, speeches, and parts of *The Diary of a Writer*, against the context of nineteenth-century Western European and Russian literature. A variety of critical and scholarly approaches (from Russian Formalists to recent Western scholars) will be sampled and evaluated.]

**[RUSSL 671 Seminar in Nineteenth-Century Russian Literature]**

Fall. 4 credits. Not offered 1998–99.  
P. Carden.

Topic: *War and Peace*.]

**[RUSSL 672 Seminar in Twentieth-Century Russian Literature]**

Fall. 4 credits. Open to advanced undergraduates. Not offered 1998–99.]

**[RUSSL 673 The Russian Nabokov]**

Fall. 4 credits. Also open to advanced undergraduates. Not offered 1998–99.  
G. Shapiro.

Vladimir Nabokov wrote much verse, several plays, numerous short stories, and nine novels in Russian before switching to English. He is a major Russian writer of the twentieth century. This seminar will examine his work in the context of modern Russian literature, concentrating in particular on the novels. Knowledge of Russian is highly desirable, but all the works discussed also exist in English translation.]

**[RUSSL 675 Russian Literature, 1917–1945]**

Fall. 4 credits. Not offered 1998–99.

This semester will focus on the achievements of Russian prose between the two World Wars. Among the authors whose works will be closely read and discussed, there are Babel, Olesha, Zoshchenko, Ilf and Petrov, Bulgakov, and Nabokov.]

**[RUSSL 676 Russian Literature, 1945–Present]**

Spring. 4 credits. Not offered 1998–99.]

**[RUSSL 698 Russian Symbolism]**

Fall. 4 credits. Not offered 1998–99.  
P. Carden.

Around 1886 the trends in French culture represented by Baudelaire and Mallarmé crystallized into a new cultural movement, called in some of its aspects the Decadence and in others Symbolism. The new sentiments about the nature of art spread throughout Europe, drawing in England, the Scandinavian countries, Germany, and Russia. The first stirrings of Symbolism were in the ascendant in Russian cultural life and it remained the dominant force until 1910. Our task will be to study the phenomenon of Symbolism as it touched the arts in Russia, including not only literature, but dance, theater, and the visual arts. Because Symbolism was a movement that cut across national boundaries, we will study the seminal works of European art that created the climate in which Russian Symbolism was conceived and came to maturity.]

**[RUSSL 699 Russian Modernism]**

Spring. 4 credits. Not offered 1998–99.  
P. Carden.

We will be investigating the rich and innovative period of the avant-garde in Russia from 1910 to 1925. In addition to examining outstanding works in a variety of forms, we will look at the movements, social context, and ties to the European avant-garde. Among the writers whose works we will examine are Blok, Bely, Mayakovsky, Khlebnikov, Pilnyak and Babel. We will examine theater through the Futurist performance piece, "Victory Over the Sun," through Meyerhold's productions of Mayakovsky's plays and other experimental pieces, and through mass spectacles. We will discuss the film theories of Eisenstein and Dziga Vertov and see several of their films. In the visual arts we will be examining the experiments of Larionov and Goncharova, Malevich, Kandinsky, and Tatlin. We will also look at the photomontage of Rodchenko.]

## RUSSIAN AND EAST EUROPEAN STUDIES MAJOR

See under "Special Programs and Interdisciplinary Studies."

## SANSKRIT

See under Asian Studies.

## SERBO-CROATIAN

See Language Courses under Modern Languages.

## SCIENCE AND TECHNOLOGY STUDIES

P. R. Dear, acting chair; R. N. Boyd, M. A. Dennis, S. H. Hilgartner, R. Kline, B. V. Lewenstein, W. R. Lynn; emeritus, R. W. Miller, T. J. Pinch, A. G. Power, J. V. Reppy, M. W. Rossiter, L. P. Williams, emeritus. Adjunct faculty: J. J. Brumberg, W. B. Provine, Z. Warhaft

The importance of science and technology in the modern world is difficult to overstate. Whether one looks at the role of computers in society, the history of evolutionary theory, the challenges of environmental controversies, the ethical dilemmas of biomedicine, or the military applications of research, science and technology profoundly affect our lives—often in ways that we scarcely understand or only dimly perceive. The field of science & technology studies uses tools from the history, philosophy, sociology, and politics of science and technology to examine science and technology in their social and cultural context and to explore their political and policy implications. Systematic, integrated study of the origins and impacts of science and technology provides an understanding of the interactions among science, technology, and society and yields invaluable insights into the nature of the modern world.

## The Science & Technology Studies Major

The major in Science & Technology Studies offers students wishing to pursue careers in law, public policy, health care, or management an opportunity to develop a full appreciation of the place of science and technology in society. The curriculum aims to further students' understanding of the historical, social, political, and ethical aspects of science and technology and to enable students to participate effectively in policy debates and decision making. In today's world, issues at the intersection of the technical and social arise continually in professional practice, management, and research. Thus, the integrated approach of the S&TS major provides a strong foundation for careers in the professions, in public policy, and in management, as well as in research and teaching.

### Themes of the Major

Students in the S&TS major develop a program individually tailored to their particular interests. To give their coursework a coherent focus, students select a theme that draws together a group of related courses. Available themes include:

1. *Science, Technology & Public Policy.* Many of the most important policy issues of our time involve science and technology. This theme offers students an opportunity to gain a deep appreciation of the problems this situation raises in democratic societies. Through courses that survey the place of science in American politics and through courses that focus on such substantive issues as national technology policy or the politics of genetic engineering, this theme explores the tensions between expertise and democracy, the uses of scientific knowledge in making and legitimating policy, social movements that question technology and science, and contemporary debates over economics, innovation, and technology policy.
2. *Technology, Culture, and Society.* Students interested in this theme may examine the connections among technology and society by studying the manifold ways in which social groups (scientists, engineers, inventors, corporations, government agencies, and consumers) interact to construct technological artifacts and systems, and how the use of these artifacts and systems is related to social and cultural change. Areas of particular interest are: computers and society, the military and technological change, gender and technology, biotechnology and society, and telecommunication policy.
3. *Environment, Science, & Society.* By focusing on the relationship between scientific knowledge and political power, this theme offers unique insights into the making and implementation of environmental policy. Courses are available on such topics as American environmental politics, international environmental policy, science and the law, the history of agricultural science, and environmental communication. Students explore the causes and consequences of environmental controversies, the nature of risk and uncertainty in environmental issues, the roles of experts and the public in

environmental decisions, and the challenges of global environmental policy.

4. *History and Philosophy of Science and Technology.* This theme provides students with an appreciation of science and technology in historical perspective and with an understanding of the philosophical problems posed by scientific knowledge. Courses available range from broad surveys to intensive studies of focused subjects. Students in this theme address such topics as the emergence of modern science; gender and science; the goal of achieving valid knowledge and the philosophical and institutional problems that this entails; the issues for history and philosophy of science raised by the new sociology of scientific knowledge; the relationship between knowledge, technology, and ethics; and the impact of major institutions—such as religion, medicine, the military, and the modern consumer economy—on the development of the sciences.

Beyond the four themes described above, S&TS majors may also create their own themes, carefully tailored to their particular interests. Examples might include "Computers, Innovation, and Society" or "Science, Technology, and Globalization."

#### Admission to the Major

Students intending to major in Science & Technology Studies should submit an application during their sophomore year. Juniors are considered on a case-by-case basis. The application includes (1) a one-page statement explaining the student's intellectual interests and why the major is consistent with the student's academic interests and goals; (2) the theme the student wishes to pursue in the major; (3) a tentative plan of courses fulfilling S&TS requirements; and (4) an up-to-date transcript of work completed at Cornell University (and elsewhere, if applicable).

Acceptance into the major requires completion of the following prerequisites: a) two introductory courses chosen from some combination of history, philosophy, sociology, or government; b) the science requirement of the College of Arts and Sciences; c) mathematics or computer science courses in fulfillment of the Arts College Group Two distribution requirement. Sophomores in the process of completing these prerequisites may be admitted to the major on a *provisional* basis. Further information and application materials are available at 275 Clark Hall (255-6047).

#### Requirements

S&TS majors must complete the following requirements:

1. Core courses: Science and Technology Studies majors will be required to take:
  - (a) either S&TS 250 (Technology in Society) or S&TS 282 (Science in Western Civilization); and
  - (b) S&TS 381 (Philosophy of Science: Knowledge and Objectivity) or S&TS 389 (Philosophy of Science: Evidence and Explanation) or S&TS 201 (What is Science? An Introduction to Social Studies of Science and Technology); and

- (c) S&TS 390 (Science in the American Polity: 1800-1960) or S&TS 391 (Science in the American Polity: 1960-now) or S&TS 442 (Sociology of Science).

2. Additional Science and Technology Studies Courses: Science and Technology Studies majors will be required to complete at least 21 credit hours of additional courses in Science and Technology Studies, subject to the following restrictions:

- (a) Breadth requirement: at least one course beyond the core courses in each of the three areas of concentration (history, philosophy, and social studies of science and technology);
- (b) Depth requirement: at least two courses in one area beyond the core courses and intended for advanced undergraduates or graduate students.

3. Science Requirement: in addition to the science requirement of the College of Arts and Sciences, Science and Technology Studies majors are required to take an additional two semesters of a natural science or engineering (including computer science). Mathematics sufficient to follow the additional science requirement should be completed before undertaking that requirement. Choice of these courses should be made in consultation with the student's major adviser and should be related to the theme selected by the student.

#### The Honors Program

The honors program is designed to provide independent research opportunities for academically talented S&TS majors. Students who enroll in the honors program are expected to do independent study and research, with faculty guidance, on issues in science and technology studies. Students who participate in the program should find the experience stimulating and rewarding whether or not they intend to pursue a research career. S&TS majors are considered for entry into the honors program at the end of the spring semester before their junior year. More information on the honors program is available from the S&TS undergraduate office at 275 Clark (255-6047).

#### The Biology and Society Major

The Department of Science & Technology Studies also offers the Biology and Society major, which includes faculty from throughout the university. The Biology and Society major is ideally suited for students who wish to combine training in biology with exposure to perspectives from the social sciences and humanities on the social, political, and ethical aspects of modern biology. In addition to providing foundational training in basic biology, Biology and Society students obtain background in the social dimensions of modern biology and in the biological dimensions of contemporary social issues.

The Biology and Society major is offered to students enrolled in the College of Arts and Sciences and the College of Human Ecology. Undergraduates in the College of Agriculture and Life Sciences can develop an approved sequence of courses from the Biology and Society curriculum under general studies. The major is coordinated for students in all colleges through the Biology and Society

office. Students can get information, specific course requirements, and application procedures for the major from the office in 275 Clark Hall, 255-6042.

A full description of the Biology and Society major can be found in the Courses of Study section entitled Special Programs and Interdisciplinary Studies.

#### The Concentration in Science and Technology Studies

P. R. Dear, acting chair; R. N. Boyd, M. A. Dennis, S. H. Hilgartner, R. Kline, B. V. Lewenstein, W. R. Lynn; emeritus, R. W. Miller, T. J. Pinch, A. G. Power, J. V. Reppy, M. W. Rossiter, L. P. Williams, emeritus. Adjunct faculty: J. J. Brumberg, W. B. Provine, Z. Warhaft

The concentration (or minor) in Science & Technology Studies (S&TS) is designed for students who wish to engage in a systematic, interdisciplinary exploration of the role of science and technology in modern societies. The concentration is intended for students with varied academic interests and career goals. Majors in the natural sciences and engineering have an opportunity to explore the social, political, and ethical implications of their selected fields of specialization, while students majoring in the humanities and social sciences have a chance to study the processes, products, and impacts of science and technology from multiple disciplinary perspectives.

The S&TS concentration permits students to develop an individualized program of study closely related to their major field. For example, students might use the S&TS concentration to further explore issues related to their major, focusing on such topics as computers and society; gender and technology; science and law; biotechnology; science and politics; and environmental policy. By choosing courses in S&TS which fit their particular goals, students can tailor the concentration to provide breadth and depth in areas of special interest.

S&TS courses are organized into three areas: history, philosophy, and social studies of science and technology. To satisfy the requirements for the S&TS concentration, students must complete with letter grades a minimum of four courses selected from the course offerings listed for the major. At least one course should be chosen from the list of core courses. The remaining three courses should be chosen in consultation with an S&TS faculty adviser and must be drawn from at least two of the three areas. Interested students may obtain further information about courses by contacting the S&TS undergraduate office, 275 Clark Hall (255-6042).

#### Course Offerings

History  
Philosophy  
Social Studies of Science  
Independent Study

#### History

##### S&TS 233 Agriculture, History, and Society: From Squanto to Biotechnology

Fall. 3 credits. M. W. Rossiter.  
This course will survey the major themes in the development of agriculture and



agribusiness in the United States in the nineteenth and twentieth centuries. These include particular individuals (such as Liberty Hyde Bailey, Luther Burbank, G. W. Carver, Henry A. Wallace, and Norman Borlaug), the rise of government support and institutions (including U.S.D.A. and Cornell), noteworthy events (the Dust Bowl, World War II, and the environmental movement), and the achievements of the recent Green and "Gene" Revolutions.

**S&TS 250 Technology in Society (also Electrical Engineering 250 and History 250)**

Fall. 3 credits.

For description, see ENGRG 250.

**[S&TS 281 Science in Western Civilization (also History 281) #**

Fall. 4 credits. Not offered 1998–99.

For description, see HIST 281.]

**S&TS 282 Science in Western Civilization #**

Spring. 4 credits.

For description, see HIST 282.

**S&TS 287 Evolution (also History 287)**

Fall. 4 credits.

For description, see BIO G 207.

**S&TS 292 Inventing the Power and Information Societies (also Electrical Engineering 298 and Engineering 298 and History 292)**

Spring. 3 credits.

For description, see ENGRG 298.

**S&TS 355 Computers: From Babbage to Gates**

Fall. 4 credits. M. Price.

Computers have not always been the ubiquitous beige boxes gracing our desktops: in Victorian London, Charles Babbage attempted to build his analytical engine using brass gears and steel rods; and during World War II the Allied governments used sophisticated electro-mechanical and electronic "brains" to break Axis codes. Machines that once occupied entire rooms now travel in knapsacks. How did this technology, once considered esoteric and useful to only technical specialists, colonize industry, academia, the military, the federal government, and the home? Using primary historical materials, including novels, films, archival documents and other texts we will follow computers from Babbage's Victorian dream of an analytical engine to the visions of contemporary moguls like Bill Gates whose goal is "information at your fingertips." We will explore not only how computer technology affects society, but how culture and politics enable and sustain the development of the machine. This is a course in the history and sociology of computers; a background in computer science is not required. (No technical knowledge of computer use is presumed or required.)

**[S&TS 416 Enlightened Science (also History 416)**

Spring. 4 credits. Not offered 1998–99.

P. Dear, M. Dennis.

For description, see HIST 416.]

**S&TS 433 International History of Science**

Spring. 4 credits. M. W. Rossiter.

A survey of the major scientific events and institutions in several foreign nations, including developing countries. The course covers the period 1660 to the present and

gives some attention to who in each country becomes a scientist, who rises to the top, and who emigrates. Weekly readings and a research paper.

**[S&TS 444 Historical Issues of Gender and Science (also Women's Studies 444)**

Fall. 4 credits. Open to sophomores. Not offered 1998–99. M. W. Rossiter.

One-semester survey of women's role in science and engineering from antiquity to the 1980s, with special emphasis on the United States in the twentieth century. Readings will include biographies and autobiographies of prominent women scientists, educational writings and other primary sources, and recent historical and sociological studies. By the end of the semester, we shall have attained a broad view of the problems that have faced women entering science and those that still remain.]

**S&TS 447 Seminar in the History of Biology (also Biology and Society 447, History 415, and Biological Sciences 467)**

Summer. 4 credits. Limited to 18 students. S-U grades optional.

For description see Biology Sci (BIO G) 467.

**S&TS 525 Seminar in the History of Technology (also History 525)**

Fall. 4 credits. R. Kline.

Exploration of the history of technology in Europe and the United States from the eighteenth century to the present. Typical topics include the industrial revolution in Britain, the emergence of engineering as a profession, military support of technological change, labor and technology, the "incorporation" of science and engineering, technological utopias, cultural myths of engineers and inventors, social aspects of urbanization in the city and on the farm, post-war consumerism, and gender and technology. The interests of students and recent literature in the field will be considered in selecting the topics for the seminar.

**S&TS 644 Topics in the History of Women in Science (also Women's Studies 644)**

Fall. 4 credits. M. W. Rossiter.

This is a one-semester graduate seminar on selected topics in the history of women and gender in science and technology, covering mostly the U.S. in the 20th century but broadly defined to include earlier periods and other countries. It seeks to acquaint advanced students with some of the best recent literature on this topic and to identify and explore possible new topics. Weekly readings and a research paper.

**[S&TS 680 Seminar in Historiographical Approaches to Sciences (also History 680)**

Fall. 4 credits. Not offered 1998–99.

For description, see History 680.]

**[S&TS 682 Topics in the Scientific Revolution (also History 682)**

Fall. 4 credits. Not offered 1998–99.

For description, see HIST 682.]

**[S&TS 687 Seminar in the History of the Agricultural Sciences**

Fall. 4 credits. Open to advanced

students interested in the history of the agricultural sciences, broadly defined. Not offered 1998–99. M. W. Rossiter. Weekly readings and a research paper.]

**[S&TS 777 Science, Technology and the Cold War**

Fall. 4 credits. Permission of instructor required for undergraduate students. Not offered 1998–99. M. Dennis.

This graduate seminar will examine the historical transformation wrought in the organization and practice of the physical, biomedical, and environmental sciences since 1945. How did military and federal patronage affect the development of the sciences, the organization of the postwar university, and the armed services? Students will read contemporary historical materials as well as primary texts to understand the development of particular institutions, technologies, and individuals. In addition to participation in the weekly discussion, each student will prepare a research paper for presentation to the seminar.]

## Philosophy

**S&TS 205 Ethical Issues in Health and Medicine (also Biology and Society 205)**

Fall. 4 credits.

For description, see B&SOC 205.

**S&TS 206 Ethics and the Environment (also Biology and Society 206)**

Spring. 4 credits.

For description, see B&SOC 206.

**S&TS 286 Science and Human Nature (also Philosophy 286)**

Spring. 4 credits.

For description, see PHIL 286.

**S&TS 381 Philosophy of Science: Knowledge and Objectivity (also Philosophy 381)**

Fall. 4 credits.

For description, see PHIL 381.

**S&TS 681 Philosophy of Science (also Philosophy 681)**

Spring. 4 credits.

For description, see PHIL 681.

## Social Studies of Science

**S&TS 201 What is Science? An Introduction to the Social Studies of Science and Technology**

Fall. 3 credits. J. Reppy.

This course is not a science or engineering course. It is not an introduction to science and technology. It is a course which allows both science and non-science majors to reflect a little on the nature of science and technology as activities. How come science is so successful? Has it always been that way? How different really is science from other activities? How does a new invention come about?

In order to understand better what science is we will also look at what it is not. We will look at episodes of mainstream science, along with science from the X-Files. One week students may study what went on in the confirmation of Einstein's theory of relativity; another week we may hear about crop circles and parapsychology.

Throughout, we will be looking at the infrastructure of science and technology—the bits that scientists, engineers, and their textbooks take for granted. No particular science or arts requirements are needed for this course. The materials are chosen so as to

be understandable by all. We will use a variety of media, including still images, video and computer simulations.

**S&TS 311 Sociology of Medicine**

Spring. 4 credits. S. Hilgartner.

This course provides an introduction to the ways in which medical practice, biomedical technology, and the medical profession are embedded in society and shaped by social phenomena. Accountability to patients and the public, and struggles over the control of medical practice in a world where medicine is connected to gender, class, race, and personal autonomy are important overarching themes. We will examine the structure of the medical profession; medical training and professional socialization; the social organization of the hospital; and doctor-patient interactions. The course will also explore how biomedical knowledge and technology get produced, assessed, and introduced into clinical practice. Topics may include the intensive care unit, the training of surgeons, the regulation of pharmaceuticals, AIDS and breast cancer activism, genetic testing, and priority setting in biomedical science.

**S&TS 324 Environment and Society (also Rural Sociology 324 and Sociology 324)**

Fall. 3 credits.

For description, see R SOC 324.

**S&TS 350 Atomic Consequences: The Incorporation of Nuclear Weapons in Postwar America (also Government 305)**

Spring. 4 credits. M. Dennis.

This course will explicate the development of atomic weapons from early twentieth-century ruminations about super bombs in science fiction through the Manhattan Project, the postwar development of thermonuclear weapons and civil defense, and more recent plans for strategic defense. Our focus will expand to cover the lives of researchers at such institutions as Los Alamos during and after World War II as well as discussions of national politics. Other topics include the Nazi effort to develop an atomic bomb, the role of technical espionage during and after World War II, and the problems posed by the classification of technical knowledge. We will seek to understand how the bomb became part of American culture through the use of literature and film, as well as readings in primary historical documents and secondary analyses. In addition to class meetings, there is also a required screening session on W 7-10 p.m. in Uris media room b. Films will generally last less than two hours, but some are longer. Viewing the movies is an essential part of the course.

**[S&TS 352 Science Writing for the Mass Media (also Communication 352)]**

Fall. 3 credits. Not offered 1998-99.

For description, see COMM 352.]

**S&TS 360 Ethical Issues in Engineering (also Engineering 360)**

Spring. 3 credits.

For description, see ENGR 360.

**[S&TS 390 Science in the American Polity, 1800-1960 (also Government 308)]**

Fall. 4 credits. Not offered 1998-99.

M. Dennis.

How did America become a leading nation in scientific and technical research? This course charts the development of American science

from its origins in gentlemanly societies in the early nineteenth century through the development of large-scale federally funded research or Big Science. Particular attention will be paid to the importance of government patronage in creating new social and intellectual spaces for research; the importance of medicine and the biomedical disciplines for the development of university-based research; the origins and expansion of research in corporations; and the role of war in the political economy of American science.]

**S&TS 391 Science in the American Polity, 1960-Now (also Government 309)**

Spring. 4 credits. M. Dennis.

This course reviews the changing political relations between science, technology and the state in America from 1960 to the present. It focuses on the politics of choices involving science and technology in a variety of institutional settings, from Congress to courts and regulatory agencies. The tensions and contradictions between the concepts of science as an autonomous republic and as just another special interest provide the central theme for the course. Topics addressed will include research funding, technological controversies, scientific advice, citizen participation in science policy, and the use of experts in courts.

**[S&TS 400 Components and Systems: Engineering in a Social Context (also Mechanical and Aerospace Engineering)]**

Spring. 3 credits. Not offered 1998-99.

For description, see M&AE 400.]

**S&TS 401 Biology and Society: The Social Construction of Life (also Biology and Society 301)**

Fall. 4 credits.

For description, see B&SOC 301.

**[S&TS 406 Biotechnology and Law (also Biology and Society 406)]**

Fall. 4 credits. Staff.]

**[S&TS 407 Law, Science and Public Values (also Government 407 and Biology and Society 407)]**

Fall. 4 credits. Not offered 1998-99.]

**S&TS 409 From the Phonograph to Techno (also Society for the Humanities 409)**

Fall. 4 credits. Limited to 15. Permission of the instructor. T. Pinch.

In this seminar, we will treat music and sound and the ways they are produced and consumed as socio-cultural phenomena. We will be concerned to investigate specifically the way that music and sounds are related to technology and how such technologies and sounds have been shaped by and have shaped the wider society and culture of which they are a part. We will look at the history of sound technologies like the phonograph, the electronic music synthesizer, samplers, and the Sony walkman. Our perspective will be drawn from social and cultural studies of science and technology. Students will be encouraged to carry out a small original research project on their own favorite sound technology.

**[S&TS 427 Politics of Environmental Protection in America (also Government 427)]**

Fall. 4 credits. Not offered 1998-99. Staff.

An introduction to the distinctive feature of environmental protection in America, focusing

particularly on the role of law, science, and citizen activism in public policymaking. Readings from law, political science, and policy analysis will examine the changing role of expert agencies, courts, public interest groups, Congress, and the states in environmental politics since the late 1960s. Case studies of specific environmental controversies (nuclear power, siting, pesticides, endangered species) will be used to explore dominant public conceptions of risk and safety, regulatory costs and benefits, and the goals and instruments of environmental policy.]

**S&TS 442 The Sociology of Science (also City and Regional Planning 442 and Biology and Society 342)**

Spring. 4 credits. Staff.

A view of science less as an autonomous activity than as a social institution. We will discuss such issues as controversies in science, analysis of scientific text, gender and the social shaping of scientific knowledge.

**[S&TS 466 Public Communication of Science and Technology]**

Fall. 4 credits. Limited to 15. Prerequisite: COMM 352 or 360, ENGR 350 or permission of instructor. Not offered 1998-99. B. Lewenstein.

For description, see COMM 466.]

**[S&TS 467 Innovation: Theory and Policy]**

Fall. 4 credits. Open to upper-level undergraduates and interested graduate students. Prerequisite: Economics 102 or permission of the instructor. Not offered 1998-99. J. Reppy.

In this course we will study the innovation process (that is, the introduction of new technology into practice) through the critical analysis of selected theories of innovation and supporting empirical evidence. Economic theories will be contrasted to the insights to be found in science and technology studies. The focus will be on the context of interests and ideology in which the various theories have been framed and their differing implications for technology policy. Authors to be covered include Schumpeter, Solow, Scherer, Nelson and Winter and Bijker and Pinch.]

**S&TS 469 Food, Agriculture, and Society (also Biology and Society 469, and Biology General 469)**

Spring. 3 credits.

For description, see BIO G 469.

**S&TS 483 The Military and New Technology**

Fall. 4 credits.

For description, see GOVT 483.

**S&TS 490 The Integrity of Scientific Practice**

Fall. 4 credits. S. Hilgartner.

Recent scandals over scientific fraud, debates about financial conflicts of interest, disputes about the use of human and animal subjects, and tensions over ownership of data have raised concern about integrity in science. In addition, changes in the American research system—from the emergence of new university-industry relationships to the growth of electronic communication—pose new questions about who owns and controls research. The course addresses practices that present problems of integrity in research (e.g., fraud, secrecy, commercialization). It also examines how scientific practices affect the structural integrity of science as an institution.

Through these complementary concepts of integrity, the course explores the connections between the conduct of science and its cultural authority.

**[S&TS 493 Economics Meets Science Studies]**

Spring. 4 credits. Not offered 1998–99.  
J. Reppy.

This course will cover a variety of possible interactions between the disciplines of economics and science and technology studies. Economists (at least some economists) are interested in science and technology as important components in economic growth, while scholars in science studies often appeal to economic motives and institutions to explain behavior in the production of scientific and technological knowledge. We will explore ways in which economics can provide new questions and theoretical approaches for science and technology studies. From another perspective, economics, as the most “scientific” of the social sciences, is itself a subject for study. Internal critiques by economists will be compared to external analyses in the science studies literature. Readings will include works on the epistemology and use of rhetoric in economics and on the “new economics of science”, and examples of the use of economic analysis in the science studies literature.]

**[S&TS 532 Inside Technology: The Social Construction of Technology]**

Spring. 4 credits. Not offered 1998–99.  
T. J. Pinch.

Rather than analyze the social impact of technology upon society, in this course we will investigate how society gets inside technology. In other words, is it possible that the very design of technologies embody assumptions about the nature of society? And, if so, are alternative technologies possible which embody different assumptions about society? Do engineers have implicit theories about society? Is technology gendered? How can we understand the interaction of society and technology? Throughout the course the arguments will be illustrated by detailed examinations of particular technologies, such as the ballistic missile, the bicycle, the electric car, and the refrigerator.]

**[S&TS 631 Qualitative Research Methods for Studying Science]**

Fall. 4 credits. Not offered 1998–99.  
T. J. Pinch.

Much has been learned about the nature of science by sociologists and anthropologists donning lab coats and studying scientists in action. In this course we will look at the methods used in this new wave of science studies. We will examine what can be learned by interviewing scientists, from videos and from detailed examinations of scientific texts. Students will gain hands-on experience by conducting a mini-project in which they investigate some aspect of scientific culture.]

**[S&TS 645 Genetic Engineering: Politics and Society in Comparative Perspective (also Government 634)]**

Spring. 4 credits. Limited to seniors and graduate students. S. Hilgartner.

Since its development, genetic engineering has been a passionately debated technology, creating high hopes for some and deep anxieties for others. This course will trace the conflicts and power struggles over genetic engineering from its origins to the present. We will use genetic engineering as a case to

discuss some crucial issues in the relationships among science, technology, and politics: the political shaping of modern biology; the relationship between eugenics and molecular biology; the regulation of risks; the state and modern biotechnology; university-industry relationships; agriculture medicine; and biotechnology; the rise of bioethics; social movements, Green parties and technology; the socioeconomic impacts of genetic engineering; the Third World and biotechnology; and the politics of the Human Genome Project. We discuss how society deals with high-impact technologies and explore the question of the adequacy of the political-legal framework of contemporary “risk-society.”

**[S&TS 700 Special Topic 1: Science Studies and the Politics of Science]**

Fall. 4 credits. Prerequisites: S&TS 711 or permission of the instructor. Not offered 1998–99.

Theoretical developments in science and technology studies have called attention to the contingent and socially embedded character of both knowledge claims and technological systems. Drawing on literature from several disciplines, this seminar explores the consequences of these findings for social and political studies of science. Issues and problems to be considered include trust and skepticism, political and legal agency, reflexive institutions, relativism and social action, science and norms, and the co-production of knowledge and social order.]

**S&TS 700 Special Topic 2: Technology Transfer Issues]**

Spring. 4 credits. J. Reppy.

The goal of this course is to develop a coherent analytical framework for analyzing technology transfer, using insights from economics, sociology and history, and to employ that framework to evaluate current policy issues. We will study the process of technology transfer in different contexts, ranging from intra-firm and intra-industry to technology transfer between civil and military sectors and between industrialized countries and LDCs. The readings will include a mix of theoretical writings and case studies.

**S&TS 711 Introduction to Science and Technology Studies (also HIST 711)]**

Fall. 4 credits. P. Dear.

This introductory course will provide students with a foundation in the field of science and technology studies. Using classic works as well as contemporary exemplars, seminar participants will chart the terrain of this new field. Topics for discussion include, but are not limited to: historiography of science and technology and their relation to social studies of science and technology; laboratory studies; intellectual properties; science and the state; the role of instruments; fieldwork; politics and technical knowledge; philosophy of science; sociological studies of science and technology; and popularization.

**Independent Study**

**S&TS 399 Undergraduate Independent Study**

Fall or spring. 1–4 credits.  
Please apply in 275 Clark Hall.

**S&TS 699 Graduate Independent Study**

Fall or spring. 2–4 credits.  
Please apply in 275 Clark Hall.

**S&TS 700 Special Topics**

Spring. 3–4 credits.

**SINHALA (SINHALESE)**

See Language Courses under Modern Languages.

**SOCIOLOGY**

V. Nee, P. Becker, R. L. Breiger, M. Brinton, S. Caldwell, M. Clarkberg, S. Han, E. Lawler, M. Macy, P. Moen, R. Stern, D. Strang, J. M. Stycos, P. Tolbert, H. A. Walker, E. Wethington

Emeritus: D. Hayes, R. McGinnis, B. C. Rosen, R. M. Williams, Jr.

The subject matter of sociology is human social organization and institutions. The Department of Sociology offers courses in social organization that include (among other issues) examination of inequality on the basis of race, ethnicity, income, and occupation; political behavior and public policy; social psychology and group processes; and contemporary social movements for change. Courses that analyze institutions include the family, politics and issues of public policy, the analysis of voluntary organizations, and the study of networks of political and organizational action.

The Department of Sociology offers the opportunity to develop fundamental theoretical insight and advanced research skills appropriate for the study of social behavior and institutions. Graduates of the department take up careers in university, government, and business settings and in law, management, architecture, and other professions seeking men and women who demonstrate a disciplined understanding of society and social issues.

**Sociology Courses for Nonmajors**

Sociology provides students with particularly effective ways to understand the complexities of modern life. For many students, the undergraduate years are a last opportunity to gain the insights these fields have to offer. The Department of Sociology is continuing to design an array of beginning and advanced courses that convey a broad understanding of the methods and insights of sociological analysis—courses that will be of particular interest to undergraduates who may not major in sociology. First- and second-year students should note that the introductory courses (101, 103, 105, 115, 150) provide substantial focus on the sociological analysis of major issues of public life. A wide selection of general education courses is available at the 200 level. Advanced undergraduates who are majors in other fields should also see, in particular, the descriptions of Sociology 303, 310, 354, 370, 380, for which there are no prerequisites other than junior or senior status.

**Related Courses in Other Departments**

Students interested in sociology should consult the course lists of the other social science departments in the College of Arts and Sciences (including Anthropology, Economics, Government, and Psychology) and of these other departments: Organizational Behavior (College of Industrial and Labor Relations), Human Development and Family Studies (College of Human Ecology), and Rural Sociology (College of Agriculture and Life Sciences).

## The Major

Requirements for general sociology: (1) 101 and any other 100-level or 200-level course (excluding Freshman Writing Seminar) with a 2.5 minimum grade-point average; (2) no later than the junior year, the 301 and 303 methods courses; (3) one course in the department at the 400 level or higher (491 is recommended); and (4) 20 additional credits in sociology, of which 6 may be taken in related departments on the approval of the student's major adviser. A list of pre-approved courses is maintained by the director of undergraduate studies, some of which are listed under "Related Courses."

**Requirements for honors:** Potential honor students are encouraged to begin taking the methods and statistics courses during their sophomore year and to take at least 2 credits of Sociology 491, Independent Study, during their junior year. Honors students take Sociology 495-496 during their senior year. Graduation with honors requires a cumulative average of at least B+ in all sociology courses and the successful completion of an oral defense of the honors thesis. Interested students should consult the director of undergraduate studies no later than the second semester of their junior year.

**Supervised research.** Qualified sociology majors are invited to participate with faculty members in conducting research. Such projects are usually initiated in one of two ways: the student may offer to assist the faculty member in an ongoing project, or the student may request that the faculty member supervise the execution of a project conceived by the student. In either case the student should enroll in Sociology 491. Interested students may direct inquiries to any faculty member.

## Business and Organizational Studies Concentration

Sociology majors who wish to prepare for postgraduate study in professional schools (business, management, or law) or graduate studies in any of the social sciences may elect to acquire a concentration in Business and Organizational Studies. This program provides Cornell students with training in organizational studies, economic sociology, and comparative societal analysis useful in a world increasingly shaped by economic and social forces of a truly global dimension. The required *core courses* in the concentration are: SOC 105: Introduction to Economic Sociology; SOC 215: Organizations: An Introduction; and a research-oriented honors seminar to be fulfilled as an independent study course (SOC 491) with faculty members affiliated with the concentration. *Affiliated faculty* include: Penny Becker, Mary C. Brinton, Shin-Kap Han, Michael M. Macy, Victor Nee, and David Strang. In addition to the required core courses, students must take five elective courses from the following list: SOC 217: Embedded Markets; SOC 220: Culture and Conflict in Organizations; SOC 311: Solidarity and Social Control; SOC 314/514: Gender and Work; and SOC 315: Business Organization for the 1990s; SOC 326: Social Policy; and SOC 370/570: Careers. Students completing the concentration receive a letter of recommendation from the Chair based on the cumulative academic record in the concentration. See Crystal Chapman in Uris 318 for additional information on the Business and Organizational Studies concentration.

## Introductory Courses

### SOC 101 Introduction to Sociology (also RS 101)

Fall and spring. 3 credits. Fall. T. Hirsch; spring, P. Eberts.

This course provides an introduction to theory and research in sociology. It demonstrates how the insights, theories, and methods of sociological analysis can be brought to bear on major issues of social life. A primary goal is to convey a sense of the manner in which sociologists formulate theories and how the collection and analysis of data are used to evaluate those theories. The course will provide "hands-on" experience in analyzing sociological issues. Students undertake guided research exercises that involve using computers to analyze actual data. No prior background is presumed; necessary skills are covered in class and section meetings.

### SOC 103 Self and Society (also R Soc 103)

Fall. 3 credits. W. Burkard.

An introduction to microsociology, focusing on social processes within small groups, including the family. Emphasis is on leadership, conformity, social influence, cooperation and competition, distributive justice, and micro analyses of interaction.

### SOC 105 Introduction to Economic Sociology (also RS 105)

Fall. 3 credits. C. Leuenberger.

Modern social thought arose out of attempts to explain the relationship between economic development and the social transformations that gave rise to the contemporary world. Classical theorists from Karl Marx and Max Weber to Karl Polanyi focused their writings on emergent capitalist economies and societies. Contemporary social theorists likewise have sought to understand the interaction between capitalism and the social forces reacting against and emerging from modern economic development. From exchange and rational choice theories to network analysis and institutional theory, a central theme in contemporary social thought has been the relationship between the economy and society, economic action and social structure, rationality and fundamental social processes. This course provides an introduction to social thought and research seeking to understand and explain the relationship between economy and society in the modern era.

### [SOC 115 Utopia in Theory and Practice

3 credits. Not offered 1998-99. D. Strang.

This course examines imaginings of the "ideal society" and efforts to realize them. We discuss the classic literary utopias, from Plato's *Republic* to More's *Utopia* to Bellamy's *Looking Backward*, and also the dystopias of Huxley and Orwell. We also examine social experiments like the nineteenth-century American intentional communities, various socialisms, and the design of contemporary political constitutions. Throughout, the emphasis is on two sociological questions. What leads people to conceive of particular social arrangements as ideal? How can we tell social structures that can work from those that cannot?

### SOC 151 Families and the Life Course (also HDFS 151)

Spring. 3 credits. E. Wethington.

For description, see HDFS 151.

## General Education Courses

### [SOC 200 Social Problems (also RSOC 200)

Not offered 1998-99. T. Hirsch. For course description, see RSOC 200.]

### SOC 201 Religion and Family in the U.S. (also RSOC 202 and RELST 203)

Fall. 3 credits. P. Becker.

This course will examine how two fundamental social institutions—religion and the family—are interlinked in American society. As recently as the 1950s, religious institutions were organized around the needs of one dominant family form, the male-breadwinner family with a stay-at-home mother. But since the 1950s, that family form is no longer statistically dominant or culturally normative. How have religious institutions adapted to new family forms? How do religious beliefs influence behavior within families, for example, the raising of children? How do religious groups foster ideals of family life or influence our beliefs about what are "good" families? How do people's family experiences and family values influence their participation in organized religion? What models of family life are religious groups organized around? We will begin to answer these questions by drawing on readings that explore the religion-family link in a variety of religious, ethnic, and social class contexts within the contemporary United States.

### SOC 202 Population Dynamics (also RSOC 201)

Spring. 3 credits. L. Williams.

For course description, see RSOC 201.

### SOC 203 Gender, Work, and Family (also Women's Studies 203)

Spring. 3 credits. W. Burkard.

The line that divides men and women is one of the deepest and most firmly entrenched in societies. Many people believe that gender differences are natural and thus unchangeable, but most sociologists argue these differences are created and maintained by culture and social relationships. In this course, we will explore the social construction and maintenance of gender differences and inequalities, focusing primarily on the areas of work and family. Students of all levels (and genders) are welcome.

### SOC 204 Race and Ethnic Relations

Fall. 4 credits. Prerequisite: SOC 101, SOC 103, or R SOC 101. W. Burkard.

This course focuses on race and ethnic relations in contemporary perspective. It examines the social and behavioral implications of attributions of race and ethnicity in small group interaction, the world of work, and the larger society. Topics: inequalities in income and employment, affirmative action, ethnic political mobilization, patterns of marriage and family formation.

### SOC 206 International Development (also RSOC 205)

Spring. 3 credits. P. McMichael.

For course description, see RSOC 205.

### SOC 208 Social Inequality (also RSOC 209)

Spring. 3 credits. M. Brinton.

This course examines the nature and processes of social inequality in industrial societies. The principal focus is on the contemporary United States, with some comparisons to other industrial societies with



different educational and class structures. Readings include theoretical and empirical materials on urban inequality and stratification along race, class, and gender lines. The course includes ethnographies of schools and workplaces as well as more quantitative research.

**SOC 215 Organizations: An Introduction (also R SOC 215)**

Fall. 3 credits. S. Han.

This is an introductory course in the study of organizations. We will start by taking a look at various examples of organizing, including a street gang in a Boston neighborhood, General von Moltke's Prussian army, a government agency, and an industrial corporation. These brief glimpses serve as exercises in looking behind and beyond diverse rhetoric for common patterns in organizational phenomena. We will consider these both from the inside and outside perspectives. The focus of the course is upon research scholarship, not the training of managers. Nonetheless, the analytical skills you will acquire are applicable to work in firms, government agencies, and nonprofit organizations.

**[SOC 217 Embedded Markets]**

3 credits. Not offered 1998–99. S. Han.

This is a course designed for a wide range of students who are generally interested in organization perspectives on markets and businesses. The primary focus of the course is on modes of organizing. In particular, we will look at the ways in which economic actions are played out in social settings. Call that "embedded markets." For example, what are the differences, if any, between the shops in the Pyramid Mall and the Commons? What kind of books do you find in small boutique bookstores vs. supermarket bookstands, or huge chains like Barnes and Noble or Borders? Basic conceptual frameworks will be provided. Yet the course will extensively use, and ask you to come up with, contemporary and local problems to illustrate the core issues.]

**[SOC 220 Culture and Conflict in Organizations]**

3 credits. Not offered 1998–99. P. Becker.

How do the organizations we belong to shape us? What is organizational identity and how does it come about? How do cultural beliefs shape organizations? What kinds of organizations strike us as legitimate and effective, and why? Organizations may be goal-directed problem-solvers, but they're also locations for storing and transmitting social facts, like the hierarchical relations among groups, and powerful ideas, including moral codes. Organizations may seem to evolve naturally, but are often shaped by internal conflicts or powerful outsiders. The first part of this course will examine theories of organizational culture and power; the second part will consist of case studies of organizations, businesses, religious denominations, little league teams, and social movement organizations.]

**[SOC 222 Social Policy and Organization in Health, Education, and Welfare]**

3 credits. Not offered 1998–99.

D. Strang.

Introduces the development of three central kinds of social policy: those concerned with delivering medical care, schooling the young, and providing resources for the economically vulnerable. The course treats the historical

development of large-scale public programs, regulatory systems, or attempts to stimulate provide action; political struggles over social rights and the allocation of resources; and the organizations that are constructed to carry out policy. The focus is on American policy, but with considerable comparative attention to the health, education, and welfare programs of other nations.]

**[SOC 250 Religion and Public Life (also RELST 249)]**

3 credits. Not offered 1998–99. P. Becker.

This course explores how religion provides a basis for moral critique, political mobilization, and social identity in a modern society. The first part introduces basic issues—definitions of religion, the sociological approach to the study of religion, religion and modernity. In the main body of the course, we will read studies of specific religious groups and organizations in the contemporary United States—examining such questions as: "How does religion provide a basis for gender identity and gender norms? "What do religious groups and discourses contribute to public debate on issues ranging from economic justice to abortion? "How do religious leaders mobilize citizens for social action in their communities?"

**SOC 265 Latinos in the U.S. (also LSP 201 and R SOC 265)**

Spring. 3 credits (4-credit option available). H. Velez.

Exploration and analysis of the Hispanic experience in the United States. An examination of sociohistorical background and economic, psychological, and political factors that converge to shape a Latino group identity in the United States. Perspectives are suggested and developed for understanding Hispanic migrations, the plight of Latinos in urban and rural areas, and the unique problems faced by the diverse Latino groups. Groups studied include Mexican Americans, Dominicans, Cubans, and Puerto Ricans.

**SOC 290 Social Psychology of Interpersonal Relations]**

Fall. 3 credits. H. A. Walker.

The focus of this course is on the relationship between the individual and the social group. It will examine the way in which the individual shapes "society," and in turn, how society influences individual behavior. Topics include formation of self, influence and conformity, and the emergence of racial and gender differences in status and power.

## Methods and Statistics Courses

**SOC 301 Evaluating Statistical Evidence]**

Fall. 3 credits. M. Clarkberg.

A first course in statistical evidence in the social sciences, with emphasis on statistical inference and multiple regression models. Theory is supplemented with numerous applications.

**SOC 303 Design and Measurement (also HDFS 385)**

Fall. 4 credits. Prerequisite: a course in sociology. E. Wethington.

Foundations of sociological analysis; issues arising from using humans as data sources; the quality of our primary data; methods of its collection; research designs in wide use and their limitations; pragmatic considerations in doing research on humans, organizations, communities, and nations.

## Intermediate Courses

**SOC 309 The Sociology of Marriage (also SOC 509)**

Spring. 3 credits. M. Clarkberg.

Contemporary debate on the nature of the family in the U.S. often assumes a simplistic decay of the "traditional marriage." This course unpacks the myths and facts that undergird this model. We will overview the historical patterns of marriage in the United States, examine data on contemporary union formation and dissolution and their consequences, and explore various theoretical models of marriage and its decline.

**SOC 310 Sociology of War & Peace]**

Fall. 4 credits. R. M. Williams, Jr.

Every human group, community, or society presents many examples of altruism, helping, cooperation, agreement, and social harmony. Each grouping or society also manifests numerous examples of competition, rivalry, opposition, disagreement, conflict, and violence. Both conflict and cooperation are permanent and common aspects of the human condition. Collective conflicts, especially wars and revolutions, are frequent and dramatic events. But "peace" and "war" are equally active social processes, not passive happenings. This course describes various commonly accepted but erroneous notions of the causes and consequences of war and deterrence. It deals with the major theories concerning the sources of war in international and intranational social systems. The last half of the course analyzes the modes, techniques, and outcomes of efforts to restrict, regulate, and resolve international conflicts.

**[SOC 311 Solidarity and Social Control]**

4 credits. Not offered 1998–99. M. Macy.

What is the most important group that you belong to? What makes it important? What holds the group together, and how might it fall apart? How does the group recruit new members? Select leaders? Make and enforce rules? Do some members end up doing most of the work while others get a free ride? We will explore these questions from an interdisciplinary perspective, drawing on sociobiology, economics, and social psychology, as we apply alternative theories of group solidarity to a series of case studies, such as urban gangs, spiritual communes, the civil rights movement, pro-life activists, athletic teams, work groups, and college fraternities.]

**[SOC 313 Social Networks and Social Structure (also SOC 513)]**

4 credits. Not offered 1998–99.

R. L. Breiger.

A critical survey of theories and techniques of structural analysis in sociology, centering on the usefulness of social network analysis in providing integration of studies at different levels of generality. Applications in the areas of the sociology of organizations, community studies, social stratification, and dependence relations among nations. Emphasis on the mutual relevance of theories and operational research procedures.]

**[SOC 315 Business Organization for the 1990s]**

4 credits. Not offered 1998–99. D. Strang.

In the last two decades, American business organizations have undergone a revolution in form and process. Corporate downsizing has changed the face of American management, and altered white-collar career paths. Large

bureaucratic organizations are giving way to smaller firms that develop complex relations with each other rather than building from within. Japanese organizational styles and organizational reform strategies like Total Quality Management have become the buzzwords of the 1980s and 1990s. This course discusses the new forms of business organization (and their manifestation in other domains, such as education and healthcare) that mark a crucial shift in the world of work and the way it shapes people's lives.]

**SOC 322 Organizations and Social Inequality (also ILR 325)**

Fall. 3 credits. P. Tolbert.  
For course description, see ILR 325.

**SOC 324 Environment and Society (also ST&S 324 and RSOC 324)**

Fall. 3 credits. M. Pfeffer.  
For course description, see RSOC 324.

**[SOC 326 Social Policy (also SOC 526)]**

4 credits. Not offered 1998-99.  
S. B. Caldwell.  
The dramatic growth of the policy research sector as an institutional and intellectual force signals a changing relationship of social science to social policy in the United States. With an eye on that relationship, this course examines the development of social policy in selected areas, among them welfare, poverty, housing, crime, and health. The policy research sector itself—people, values, and institutions—is also surveyed.]

**[SOC 340 Health, Behavior, and Health Policy]**

3 credits. Not offered 1998-99.  
S. B. Caldwell.  
This course examines the social contexts of physical and mental health, illness and medical care; its purpose is to explore the contributions of social science to health promotion and health policy. Topic areas include: social context of health, disease and illness; social organization of health services; use of health services; effectiveness of health service use; health promotion and disease prevention; and national health care policies.]

**SOC 341 Modern Euro Society and Politics (also GOVT 341)**

Fall. 3 credits. S. Tarrow.  
For course description, see GOVT 341.

**[SOC 350 Comparative Revolutions]**

Not offered 1998-99.  
For description, see GOVT 350.]

**SOC 353 Knowledge and Society**

Spring. 3 credits. C. Leuenberger.  
This course will focus on the historical evolution of the sociology of knowledge as a theoretical paradigm and an empirical research field. We will examine the phenomenological origins of the sociology of knowledge and many of its central texts. We will study how it has been applied to such areas as personhood, interaction, religion, identity and the emotions. We will also consider epistemological questions that arise and will cover various theoretical and empirical approaches which have been influenced by the sociology of knowledge such as ethnomethodology, conversation analysis and the sociology of science and technology.

**SOC 354 Law and the Social Order**

Spring. 4 credits. W. Burkard.  
In what ways, if any, do laws and legal institutions make a difference to people who have disputes? How did lawyering come to be a modern profession? How do business organizations deal with legal ambiguity in constructing symbols of compliance with laws? How do networks of interpretive communities structure the authority of law? By exploring selected topics such as these, we seek to understand the distinctive contributions of sociology to the study of law and the social order.

**[SOC 358 Modes of Institutional Analysis (also SOC 558)]**

3 credits. Not offered 1998-99. D. Strang.  
Much social theory treats individual behavior as occurring within and shaped by "institutions." For example, discussions of American health care policy emphasize not only the preferences of physicians, businesses, and consumers, but also the institutional structure of American government that provides multiple veto points and makes broad cross-class coalitions difficult to build. This course will examine the main types of institutional analysis active in contemporary social science.]

**SOC 370 Careers (also SOC 570)**

Spring. 4 credits. S. Han.  
By examining various career paths, we will consider the implications of career as a continuous process or as a sequence of positions. We will explore the differences and similarities among different career paths and lay out the patterns and structures of the career formation from a sociological point of view. We will also discuss the settings in which the career development takes place, giving some comparative attention to the ways of organizing careers in other societies.

**SOC 371 Comparative Social Stratification (also RSOC 370)**

Fall. 3 credits. T. Lyson.  
For course description, see RSOC 370.

**SOC 380 Gender, Ideology, and Culture (also WOMNS 380)**

Spring. 4 credits. P. Becker.  
This course will explore representations of women in popular culture, including images, narratives, and religious practices. We will examine the relationship between popular culture and ideology, and look at how women "read" popular culture. The aim of the course is to enable students to think critically and analyze the effects of ideological representations of difference on personal identity construction, status, and power relationships. Readings are drawn mostly from sociology of culture and cultural studies; most texts deal with popular culture and gender in the 19th- and 20th-century United States.

## Advanced Courses

The following courses are intended for advanced undergraduates with substantial preparation as well as for graduate students in sociology and related disciplines. The normal prerequisite for all 400-level courses is one introductory course plus 301 (or an equivalent statistics course). Students who are not sure whether their background is sufficient for a particular course should consult the professor in charge.

**[SOC 408 Qualitative Methods (also SOC 508)]**

4 credits. Not offered 1998-99. P. Becker.  
This course will cover a range of qualitative methods, from fieldwork to cultural/interpretive methods. The course is designed to give students an introduction to a range of methods and techniques. Students will be required to engage in an ongoing research project on which they will report periodically throughout the course of the semester, in class discussions and in short papers that concentrate on solving concrete research problems.]

**SOC 429 Culture and Agency (also SOC 529)**

Spring. 3 credits. P. Becker.  
This course will look at the development of sociological theory on questions of culture and agency. Starting with various reflection or materialist approaches to culture that decenter agency, we will then follow the development of theories that explicitly link culture to actors and events in an attempt to account for both social reproduction and social change. The readings will cover a broad time span and a variety of intellectual approaches, including critical theory and cultural studies, but will center on the sociology of culture.

**SOC 437 Social Demography (also RSOC 438)**

Fall. 3 credits. D. Gurak.  
For course description, see RSOC 438.

**[SOC 438 Immigration and Ethnic Identity]**

4 credits. Not offered 1998-99. V. G. Nee.  
Immigration has been a central process in the peopling of American society. The early immigration to the United States involved primarily the migration and settlement of European national groups. Since 1965, the mix of immigration has shifted to include increasing diversity of ethnic groups, especially from Latin America and Asia. As American society moves into an era of increasing ethnic diversity, the issue of ethnic boundaries and identity become increasingly complex and problematic. This course seeks to examine the causes of international migration, the dynamics of immigrant incorporation into American society, and the making of new ethnic groups and identities.]

**[SOC 444 Contemporary Research in Social Stratification]**

4 credits. Not offered 1998-99.  
R. L. Breiger.  
Stratification and mobility as paired concepts, requiring mutual articulation. The interplay of structure (occupational groups, labor markets, organizational demographics, social classes) and process (tracking, career trajectories, socioeconomic attainment). Recently formulated log-linear models of mobility and structure provide a central focus of the course.]

**SOC 480/580 Identity and Interest in Collective Action**

Fall. 4 credits. M. Macy.  
This seminar examines the problem of collective action from alternative theoretical perspectives: on centered on shared *interests*, the other on common *identities*. The former claims that groups are held together because the members are interdependent and thus benefit from cooperating in a common endeavor. Others argue that effective mobilization may depend on affective ties among participants who share a salient demarcation. We will explore this debate,

- THETR 277** Video Production I (offered alternate years, and summers) 3  
OR
- THETR 377** Fundamentals of 16mm Filmmaking 4
2. One of the following theatre courses:
- THETR 250** Fundamentals of Theatre Design/Technology 4
- THETR 280** Introduction to Acting 3
- THETR 398** Directing I (prerequisite: permission) 3
3. Four courses (15–16 credits) in film offered by Theatre, Film & Dance as below, or by other departments (with consent of adviser):
- THETR 275** Introduction to Film Theory 4
- THETR 277** Video Production I (offered alternate spring semesters) 3
- THETR 291** Filming Other Cultures 3
- THETR 313** Japanese and Asian Film (not offered 1998–99) 4
- THETR 378** Soviet Film of 20s and French Film of 60s (offered alternate spring semesters not offered 1998–99) 4
- THETR 379** Modern Documentary Film (offered alternate spring semesters not offered 1998–99) 4
- THETR 383** Screenwriting 4
- THETR 386** Third Cinema (not offered 1998–99) 4
- THETR 391** Media Arts Studio I 3
- THETR 392** Media Arts Studio II 3
- THETR 395** Video: Art, Theory, Politics 4
- THETR 396** German Film (offered occasionally not offered 1998–99) 4
- THETR 413** Film and Performance (not offered 1998–99) 4
- AS&RC 435** African Cinema (not offered 1998–99) 4
- THETR 473** Film and Spiritual Questions 4
- THETR 474** Jung, Film, and the Process of Self-Knowledge (not offered 1998–99) 4
- THETR 475** Seminar in the Cinema I (not offered 1998–99) 4
- THETR 476** Seminar in the Cinema II (not offered 1998–99) 4
- THETR 477** Intermediate Film and Video Projects 4
- THETR 493** Advanced Film and Video Projects 4
- THETR 653** Myth onto Film 4
4. 15 credits of related coursework inside or outside of the Department of Theatre, Film & Dance (as approved by adviser). The courses chosen to fulfill this requirement should reinforce the student's particular interest in film, and will not necessarily be film courses per se. For example, a student interested in the psychology of film, or in ethnographic film, or in film vis-a-vis intellectual or

social history, will be encouraged to choose "related course work" in those areas.

5. With a grade of less than C, a course cannot be used toward the concentration.
6. Course work in production cannot exceed twenty credit hours.

### Honors

Students who have at the end of their junior year a GPA above 3.4 in their film concentration courses and an overall GPA above 3.0 may elect to work for honors in film during their senior year. They should consult their adviser on this matter during the spring of their junior year. Theses may be undertaken in film analysis, filmmaking and screenwriting.

### The Advanced Undergraduate Film Program

The department offers advanced study in filmmaking to students who qualify on the basis of outstanding achievement in film studies and film production courses. Acceptance to the AUPF and admission to the advanced film production course (THETR 493) will be determined by a committee of film faculty in December of each year, based on applications from students who have a proposal (script or treatment) for a film or video project. Up to four of these students will also be selected to receive the Melville Shavelson Award to help fund their advanced film projects.

### Film Study Abroad

The College of Arts and Sciences, through this department and in consort with a number of other colleges and universities, offers up to a full year of study at the Inter-University Center for Film and Critical Studies in Paris, France. The center's program is theoretical, critical, and historical. It is most useful to students pursuing a major in film studies and serves as an intensive supplement to their Cornell film courses. Fluency in French is required, and Theatre Arts 274 and 375 are prerequisites. Inquiries should be addressed to Professor Fredericksen, Cornell's liaison with the center.

### The Dance Program

The dance program offers courses in dance technique, improvisation, composition, performance, anatomical analysis of movement, and the history, theory, and criticism of dance. Technique courses include modern dance at four levels and ballet at three levels. Other dance forms, such as historical dances, Japanese Noh, Indian and Javanese, dance are offered on a rotating basis. Courses in African, jazz and ballroom dance, taken through the Physical Education program, supplement these offerings. Technique classes develop strength, flexibility, coordination, and the ability to perceive and reproduce phrases of dance movement with clarity of rhythm, body design, and expression. The more advanced courses require the ability to perform complex phrases in various styles. Students may earn up to eight academic credits (one each semester) in technique classes. Students may also satisfy the physical education requirement by taking dance technique classes in the dance program. The schedule for all dance technique classes is available in the main office of the Center for Theatre Arts. Students taking technique for

academic credit must also register through their own colleges.

The faculty offer rehearsal and performance workshops in which they choreograph and rehearse original dances, performed in public concert. Admission to rehearsal and performance classes is by audition. Students may receive one academic credit (S-U grades only) when performing in student-faculty concerts by registering for THETR 155.

### The Dance Major

To be admitted to the major, students must have completed two technique courses in modern dance or ballet at level II or above, Theatre Arts 233 (Explorations in Movement and Performance) and Theatre Arts 210 (Beginning Dance Composition and Music Resources). It is also recommended that Theatre Arts 201 (Dance Improvisation), Theatre Arts 250 (Fundamentals of Theatre Design and Technology) and Music 105 (Introduction to Music Theory) be taken before the junior year. The following requirements are expected of the major.

### Prerequisites for the Major:

**THETR 210** Beginning Dance Composition and Music Resources

**THETR 233** Explorations in Movement and Performance

Two technique courses in modern dance or ballet at level II or above

### Requirements for the Major: Credits

**Music 105** Introduction to Music Theory (or substitute at the appropriate level) 3

**ONE** course in historical dance, jazz, a non-western form, folk dance, or ballroom dance 0–3

**TWO** semesters each of ballet and modern dance (in addition to the prerequisite) 4

**THETR 155** Rehearsal and Performance 1

**THETR 201** Dance Improvisation 3

**THETR 250** Fundamentals of Design and Technology 4

**THETR 310–311** Intermediate Dance Composition 8

**THETR 312** Physical Analysis of Movement 3

**THETR 314–315** Western Dance History 8

**THETR 410** Advanced Dance Composition 4

**THETR 418** Seminar in History of Dance (or other 400-level academic dance course) 4

**THETR 491** Senior Project 4

Total 46–49

Students will be expected to perform in at least two concerts and to present at least two of their own dances, in addition to the senior project.

### Department Courses:

See individual sections for: Freshman Writing Seminars; General Survey Courses; Theatre Studies; Acting; Directing; Playwriting; Design; Technology; Stage Management; Independent Study, Internships and Honors; Film; Dance.

## Freshman Writing Seminars

### THETR 125 Deviance

Fall and spring. 3 credits. R. Saunders. This class will explore the interplay among the performance of the abnormal, its audience, and society. Creative and analytical exercises will explore the social politics and functions of deviance, both conscious and involuntary. Representative texts will include the play *Ubu Roi* and the film *Trainspotting*.

### THETR 162 Beyond Bruce Lee: Martial Arts Films of Hong Kong

Spring. 3 credits. C. Conceison. "Kung-fu" films featuring Bruce Lee, Jackie Chan, and Jet Li will be viewed and discussed in terms of their impact domestically and internationally, and examined more deeply to explore their cultural and political significance. How do they define Chinese masculinity? How do they contribute to the effort to construct a narrative history for colonized Hong Kong? What do they reveal about Hong Kong's relationship with mainland China? We will evaluate this in light of the recent return of HK to Chinese governance. Weekly film screenings will be required. Readings include background material in history and film theory, and both popular and scholarly articles on films and relevant issues. Papers will include the above topics, as well as a movie review and brief scene script. Films include "Dragon," "Rumble in the Bronx," "Once Upon a Time in China," "Lethal Weapon 4," and others.

### THETR 165 "A Devil's Haircut": Death, Dementia, and the Modern Drama

Fall and spring. 3 credits. R. Bechtel. What makes death in one film or play movingly tragic and in another uproariously funny? Why is Hamlet a tragedy and Weekend at Bernie's a comedy? Similarly, what makes one character mad and another sane? When is behavior "normal" and when is it "abnormal"? This class will examine representations of death and dementia in a variety of contexts to discover not only how these effects are achieved, but how they operate either to reinforce or critique societal norms and structures of power. Some of the possible films and plays include Natural Born Killers, Death of a Salesman, and Endgame. Writing assignments will include play analyses, film reviews, and a short dramatic scene.

### THETR 170 Truth and Meaning: How We Order Reality

Fall and spring. 3 credits. E. Force. A crucial plot element in most narratives is "revealing the truth." What does this say about how we understand experience? How much of "the truth" must be revealed to the protagonist—or to us? What happens when someone doesn't know enough? What happens when what we find out doesn't look like truth? Beginning with *Hamlet*, which turns on the importance of knowing truth, we'll examine how truth and reality are organized. We'll continue with works that question the borders of acceptable truth, including: plays—*Waiting for Godot* and *Marisol*, a novella—*The Bridge of San Luis Rey*, and two or more films. In writing assignments, we'll focus on treatments of truth: how it's identified, presented, supported, questioned, and used to draw conclusions.

### THETR 190 When a Girly Girl Meets a Manly Man: Gender & Tales of Love

Fall. 3 credits. T. Rhys. Romantic love remains one of the most persistent themes of popular entertainment. By examining selected plays and films that depict men and women in the search for love, we will explore questions of gender construction in popular culture.

## General Survey Courses

### THETR 230 Creating Theatre

Spring. 3 credits. Limited to 25 students. D. Hall and faculty.

An introduction to theatrical production for the non-major. Students will develop a new critical perspective of the performing arts by examining the creation of theatre onstage and backstage through lectures, demonstrations, discussions with various faculty and staff at the Center for Theatre Arts, and by attending department productions. Some writing is required.

### THETR 301 Mind and Memory: Explorations of Creativity in the Arts and Sciences (also English 301 and Music 372)

Spring. 4 credits. Limited to 40 students. For description, see English 301.

### [THETR 430 Introduction to Theatre Management

Fall. 4 credits. Limited to 15 students. Not offered 1998-99. J. E. Gainor. This class is designed to introduce students to the profession of theatre management. The class will be a project-oriented study of components of the field, such as marketing, fundraising, contracts, organizational structures, personnel management, accounting, and box office.]

## Theatre Studies Courses

### THETR 223 The Comic Theater (also Comparative Literature 223 and Classics 223) #

Spring. 3 credits. J. Rusten. For description, see Classics 223.

### THETR 240 Introduction to World Theatre I #

Fall. 4 credits. R. Schneider. A survey of the roots of theatrical representation around the world from ritual practice to classical Greek and Roman theatre as well as Indian, Chinese, Japanese, African, and native performance. A charting of major developments in the theatre—playwriting, acting, staging, architecture—through the 17th century.

### THETR 241 Introduction to World Theatre II #

Spring. 4 credits. R. Schneider. A survey of the major developments and innovations in world theatre since 1642, exploring the evolution of naturalism, the birth of the director, as well as the emergence of the avant-garde in the West and its supposed demise today. This course will examine the impact of colonialism on theatre practices around the world.

### [THETR 322 Russian Drama and Theatre (also Russian Literature 332)

4 credits. Not offered 1998-99. S. Senderovich. See Russian Literature 322 for description.]

### THETR 332 Medieval and Renaissance Theatre (also Comparative Literature 332 and English)

Spring. 4 credits. Prerequisites: THETR 240 or permission of instructor. J. E. Gainor.

Besides the discussion of representative plays from these periods, this class may focus on questions such as the staging of medieval drama, the relation between the church and the community, and the ways in which historians and critics have interpreted the Renaissance, especially in light of class, race, and gender on stage as well as in the audience.

### THETR 333 European Drama 1660-1900: Moliere to Ibsen (also English 335 and Comparative Literature 336)

Spring. 4 credits. R. Parker. See English 335 for description.

### THETR 335 The Modern and Contemporary Theatre (also Comparative Literature 335)

Fall. 4 credits. Prerequisites: THETR 240 or permission of instructor. R. Schneider. A study of the drama and its cultural contexts from the late nineteenth century to the present. This course will raise questions about modern as well as postmodern theories of performance and the role of theatre in society. It may also examine western style theatre in non-western settings.

### [THETR 336 American Drama and Theatre (also English 336)

Spring. 4 credits. Limited to 25 students. Prerequisite: permission of instructor. Not offered 1998-99. J. E. Gainor. A survey of American theatre from 1900-1960. Emphasis will be placed on the relationship among theatre, culture, and history.]

### [THETR 337 Contemporary American Theatre (also English 337)

4 credits. Limited to 20 students. Not offered 1998-99. J. E. Gainor. A survey of American drama and theatre post-1960. Particular emphasis will be placed on plays by women and dramatists of color to explore questions of identity and theatrical responses to contemporary American culture.]

### [THETR 339 Theories and Techniques of 20th Century Western Theatre

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99. R. Schneider.

A look at Western performance across the 20th century emphasizing theatre theory and directing technique rather than drama. Beginning with symbolism, naturalism and the avant-garde we'll move on to explore Meyerhold, dada, Brecht, Artaud, Happenings and performance art, Boal, theatre images, feminist theatre, multicultural theatre, theatre of AIDS, and other theatre issues and innovations. Students will engage in performance projects.]

### [THETR 345 The Tragic Theater (also Classics 345 and Comp. Literature 344)

Spring. 4 credits. Limited to 40 students. Not offered 1998-99. F. Ahl. See Classics 345 for description.]

### [THETR 372 English Drama to 1700 (also English 372) #

Fall. 4 credits. Not offered 1998-99. S. McMillin. See English 372 for description.]



**[THETR 373 English Drama from 1700 to the Present (also English 373)]**

4 credits. Not offered 1998–99.

S. McMillin.

See English 373 for description.]

**[THETR 420 Brecht, Artaud, Mueller, Wilson (also German Studies 430 and Comparative Literature 430)]**

4 credits. Not offered 1998–99.

D. Bathrick.

See German Studies 430 for description.]

**THETR 424 Elizabethan and Jacobean Drama (also English 425)**

Fall. 4 credits. Limited to 15 students.

B. Adams.

See English 425 for a complete description.

**[THETR 425 Introduction to Dramaturgy and Dramatic Criticism]**

4 credits. Prerequisite: THETR 240 &amp; 241, or their equivalents. Limited to 15 students. Not offered 1998–99.

J. E. Gainor.

What is dramaturgy? What does a dramaturg do? We will examine this position in the theatre in both historical and practical modes. The class will be primarily a practicum, involving dramaturgical work on departmental productions, participation with student playwrights on new script development, and practice in the writing of dramatic criticism.]

**[THETR 431 Theory of the Theatre and Drama (also Comparative Literature 433)] #**

4 credits. Prerequisite: some theatre history and dramatic literature work at the 300 level or permission of instructor. Not offered 1998–99.

A survey of dramatic theory and theories of theatrical representation from Aristotle to the present.]

**[THETR 433 Dramaturgy: Play and Period (also English 435)]**

Fall. 4 credits. Not offered 1998–99.

J. E. Gainor.

Topic for 1997: The Theatre of George Bernard Shaw. A survey of the plays and non-dramatic writings in their social, historical, and theatrical contexts.]

**THETR 435 Special Topics: The Victorian and Edwardian Theatre (also English 422)**

Fall. 4 credits. Limited to 15 students.

Prerequisite: permission of instructor.

J. E. Gainor.

An in-depth exploration of theatre and drama in England from the mid-nineteenth through early twentieth centuries. Topics will include melodrama, the social problem play, the popular stage, the conditions of theatrical production, and the impact of European theatre. Representative authors include Robertson, Pinero, Shaw, Wilde, Robins, Galsworthy, and St. John.

**[THETR 436 The Female Dramatic Tradition (also Women's Studies 433)]**

4 credits. Not offered 1998–99.

J. E. Gainor.

Is there a "female dramaturgy"? What is the female tradition in the theatre? The course will explore these questions through an investigation of texts by women dramatists, including Hrotsvitha, Aphra Behn, and Caryl Churchill, as well as theory by such critics as Sue Ellen Case and Jill Dolan.]

**[THETR 438 East and West German Drama (also German Studies 438 and Theatre 648)]**

4 credits. Not offered 1998–99.

D. Bathrick.

Major historical and textual developments in German theatre from the end of World War II to the present. Leading dramatists from West and East Germany, Switzerland, and Austria (Brecht, Frisch, Durrenmatt, Weiss, Hochhuth, Muller, Braun, Kroetz, Handke, and others) will be treated in the light of the political events and aesthetic-dramaturgical traditions from which they emerge and with which they are taking issue.]

**THETR 439 Theatre of Commodities: Advertising, TV, and Performance (also Women's Studies 441/641)**

Spring. 3 credits. R. Schneider and

A. Villarejo.

This course will explore the employment of bodies and objects as representational emblems of value and desire in late capitalism. We will analyze the ways in which desire circulates through print advertising, television, and the avant-garde. We will examine socio-cultural constructions of the relationship between screen bodies and live bodies, especially as involves advertising and audience. We will explore conceptual and culturally inscribed spaces between notions of desire, fulfillment, deferral and value coding. Throughout, feminist analyses of gender construction and deployment in the realms of the market, popular culture, and "high" art will frame our inquiry. Finally we will ask questions about the problematic of interventionary tactics in art and popular culture relative to consumption and commodity aesthetics. The course will draw on Williamson, Marx, Benjamin, Freud, Irigaray, de Certeau, Baudrillard, Dienst, Goldman, McClintock, Bordieu, Friedan, Haug, Lee, Fiske, Goffman, Lears, Murray, Taylor, and others as well as numerous print advertisements, television texts, and performance artworks.

**THETR 445 Text Analysis for Production: How to Get from the Text onto the Stage**

Fall. 4 credits. Prerequisite: THETR 240 or THETR 281 or THETR 250 or THETR 398, and permission of instructor. Limited to 15 students. B. Levitt.

This course examines the play as the central, essential source for production decisions made by the actor, the director, the designer and the dramaturg. Students "present" their conclusions about the performance of studied texts through project work as either an actor, director, designer or dramaturg, as well as through two to three papers.

**THETR 454 American Musical Theatre (also English 454)**

Spring. 4 credits. Prerequisite: ENGL 272 or THETR 240 and 241 and ability to read music at the level of MUSIC 105.

S. McMillin.

See English 454 for description.

**THETR 459 Contemporary British Drama (also English 459)**

Fall. 4 credits. Limited to 15 students.

S. McMillin.

See English 459 for a complete description.

**THETR 470 The Japanese Noh Theater and Modern Dramatists (also Asian Studies 470 and Comparative Literature 470) @**

Fall. 4 credits. Alternates with THETR 471. K. Brazell.

For description, see Asian Studies 470.

**[THETR 471 Japanese Theatre (also Asian Studies 471)] @ #**

Fall. 4 credits. Not offered 1998–99.

K. Brazell.

For description, see Asian Studies 471.]

**THETR 600 Proseminar in Theatre Studies**

Spring. 4 credits. Limited to Theatre Arts graduate students.

An introduction to the theory and methods involved in the study of the theatre. Attention will focus on pedagogy and the profession in Part I. Part II will explore current scholarly trends.

**[THETR 637 Seminar in Dramatic Theory (also Comparative Literature 638)]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998–99.

R. Schneider.

Topic varies each semester.]

**[THETR 648 East and West German Drama: Post-1945 (also THETR 438 and German Studies 438)]**

3 credits. Not offered 1998–99.

D. Bathrick.]

**[THETR 660 Visual Ideology (also Comparative Literature 660 and German Studies 660)]**

4 credits. Not offered 1998–99. G. Waite.

For description, see German Studies 660.]

**[THETR 679 Bertolt Brecht in Context (also German Studies 679 and Comparative Literature 679)]**

4 credits. Requirements: seminar paper that will form the basis for an oral presentation for class discussion. Not offered 1998–99. D. Bathrick.

See German Studies 679 for description.]

**[THETR 703 Theorizing Film (also English 703 and French Lit 695)]**

Fall. 4 credits. Not offered 1998–99.

T. Murray.

See English 703 for description.]

**Acting****THETR 155 Rehearsal and Performance**

Fall or spring. 1–2 credits. 1 credit per production experience per semester up to 2 credits per semester. Students must register for the course in the term in which credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the department's scheduled auditions. Students should add this course only after they have been assigned roles. S-U grades only.

The study, development, and performance of roles in departmental theatre or dance productions or the study and practice of directing as experienced in assisting faculty and guest directors.

**THETR 205 Rehearsal Workshop**

Fall or spring. 2 credits. Limited to 30 students. Prerequisites: participation in a particular department production; and by permission. Staff.

This course will enable students participating in a particular production to gain expertise and/or knowledge to contribute to that production. The focus of the class will depend on the needs of a particular production (history, choreography, textwork, dramaturgy, etc).

**THETR 280 Introduction to Acting**

Fall or spring. 3 credits. Each section is limited to 16 students. Preregistration and registration only through roster in the department office, Center for Theatre Arts. Staff.

An introduction to the actor's technique and performance skills, exploring the elements necessary to begin training as an actor, i.e., observation, concentration, and imagination. Focus will be on physical and vocal exercises, improvisation, and text and character. There is required play reading, play attendance, and some scene study.

**THETR 281 Acting I**

Fall or spring. 3 credits. Each section limited to 14 students. Prerequisites: THETR 280 and audition. Registration only through roster in department office, the Center for Theatre Arts. 281 is restricted to sophomores and above. B. Levitt and S. Cole.

Practical exploration of the actor's craft through improvisation and exercises in physical and psychological action. Scene study utilizing the plays of Williams, Inge, and Miller.

**THETR 282 Standard American Stage Speech**

Fall. 3 credits. Prerequisites: THETR 280 and permission of instructor. A. Van Dyke.

An introduction to Standard American Stage Speech. We will study various regional American accents and Standard American Stage Speech using the International Phonetic Alphabet (IPA) as a way to designate the vowel, diphthong, and consonant sounds of spoken English. The goal of this course is to learn speech for use in performing Shakespeare, Shaw, Chekov, Moliere, etc.

**[THETR 283 Voice and Speech for Performance]**

2 credits. Limited to 12 students. Primarily for department majors. Prerequisite: permission of instructor. Not offered 1998-99. Faculty.

Registration only through department roster in the main office of the Center for Theatre Arts. Development of the speaking voice with additional emphasis on dramatic interpretation.]

**THETR 284 Speech and Dialects for Performance**

Spring. 3 credits. Limited to 12 students. Primarily for department majors or advance undergraduate training program candidates. Prerequisites: THETR 281 and permission of instructor. A. Van Dyke.

Development of speech and dialects in dramatic text.

**[THETR 287 Summer Acting Workshop]**

Summer. 3 credits. Limited to 16 students in a section. Not offered summer 1998. Levitt and staff.

An introduction to the processes of acting. Practice in training techniques, rehearsal procedures, and methodology.]

**THETR 380 Acting II**

Fall. 3 credits. Prerequisite: THETR 281 and audition. Limited to 12 students. S. Cole.

A continuation of Acting I. Special consideration will be given to a physical approach to characterization utilizing the plays of Chekhov and Ibsen.

**THETR 381 Acting III: Advanced Scene Study**

Spring. 3 credits. Prerequisite: THETR 380 and audition. Limited to 10 students. R. Wilson.

This course focuses on advanced problems in language and period style (movement, bows, curtsies, and period dances). Monologues and scenes will be drawn from these playwrights: Shakespeare and Moliere.

**THETR 385 Advanced Studies in Acting Techniques**

Spring. 3 credits. Prerequisites: THETR 281, Audition and permission of instructor. Limited to 10 students. Topic varies each semester. May be repeated for credit. B. Levitt.

Topic for Spring 1999: this course will explore evolving and performing material from nonscripted texts. Material will be drawn from newspapers, novels, poetry, biography, auto-biography, and interviews. Examples will be drawn from monologists such as Spaulding Grey; performance artists such as Karen Findlay; and writer/performers such as Anna Deavere Smith.

**[THETR 387 Movement for the Actor]**

3 credits. Prerequisites: THETR 281 and permission of instructor. Limited to 10 students. Not offered 1998-99. R. Wilson. Physical skills for the actor will be developed through work with LeCoq-based Neutral Mask corporeal mime, and physical acting techniques.]

**THETR 415 The History of Acting**

Spring. 3 credits. Limited to 10 students. Prerequisites: THETR 380 and permission of instructor. S. Cole.

A study of the art of acting in its historical and cultural context from the Greeks to the early 20th Century, with an emphasis on an analytical understanding of acting methodology in relation to social context. Lectures and film showings, with student papers and presentations required.

**Directing****THETR 177 Student Laboratory Theatre Company**

Spring. 1-2 credits.

The Student Laboratory Theatre Company is a group of student-actors who earn credit by acting in three scenes directed by students taking THETR 498. Students enrolling in SLTC for credit will earn 1 credit for 2 projects and 2 credits for 3 projects. SLTC also meets with directors once a week.

**THETR 398 Fundamentals of Directing I**

Fall. 3 credits. Limited to 10 students. Prerequisite: permission of instructor. Special consideration is given to students who have completed THETR 280 or are intending to continue in the area of stage or screen directing. D. Feldshuh.

Focused, practical exercises teach the student fundamental staging techniques that bring written text to theatrical life. A core objective is to increase the student's awareness of why and how certain stage events communicate effectively to an audience. Each student will direct a number of exercises as well as a short scene.

**[THETR 498 Fundamentals of Directing II]**

Spring. 4 credits. Enrollment strictly limited. Prerequisite: THETR 280 and 398, and permission of instructor. Special consideration is given to students who have completed THETR 280 or are intending to continue in the area of stage or screen directing. Recommended: THETR 250 and 281. Not offered 1998-99. D. Feldshuh.

This course builds on the staging techniques learned in Fundamentals of Directing I. In this course each student will direct a series of projects and public presentations focusing on specific directorial challenges.]

**THETR 499 Practicum in Directing**

Fall or spring. 1-4 credits. Prerequisites: THETR 240, 250, 280, 398, 498, and permission of instructor. D. Feldshuh.

This course will allow the student who has completed the appropriate prerequisites the opportunity to direct a full presentation of theatre in conjunction with a faculty mentor. It may also involve an internship with a prominent director on campus or the opportunity to assist a faculty or guest director.

**Playwriting****THETR 348 Playwriting**

Fall. 4 credits. Limited to 12 students. Prerequisite: permission of instructor. R. Wilson.

Various approaches and techniques are examined as the student is introduced to the art and craft of dramatic writing. The student is required to read dramatic texts, observe theatre productions and rehearsals and write. The semester culminates in the completion of a twenty to thirty minute one-act play.

**[THETR 349 Advanced Playwriting]**

4 credits. Prerequisite: THETR 348 or permission of instructor. Not offered 1998-99. R. Wilson.

A continuation of Theatre Arts 348, emphasizing advanced techniques and culminating in the completion of a full-length play.]

**THETR 497 Seminar in Playwriting**

1-4 credits. Prerequisite: THETR 348 and 349 and permission of instructor. R. Wilson.

This class is an extension of THETR 348 and 349. Students formulate a process for developing a full-length play, which they develop over the course of the semester. The class meetings are made up of discussions about the students' process and creative tactics, and reading of material generated by the playwrights.

## Design, Technology, and Stage Management

### Design

#### THETR 250 Fundamentals of Theatre Design and Technology

Fall and spring. 4 credits. Not open to first term freshman. Limited to 12 students. Registration only through department roster in CTA 225. A minimum of one credit of Production Lab (THETR 151 or 251) is strongly recommended concurrently. K. Goetz, R. Archer, J. Johnson, C. Hatcher, C. Orr Brookhouse, and E. Intemann.

An introduction to design and technology in the theatre. Lectures, discussion, and project work introduce the principles of designing scenery, costumes, lighting and sound, and the technical process of realizing designs on stage. Students are required to purchase materials, which the instructors will specify (approximate cost, \$40).

#### [THETR 263 MiniCAD for the Theatre

Spring. 3 credits. Limited to 8 students. Prerequisite: permission of instructor. Not offered 1998-99. K. Goetz and selected theatre production faculty and staff.

Students will utilize commercially available 3D modeling and rendering software to explore the process of designing scenery and lighting for the live theatre. MiniCAD, Strata StudioPro, and Photoshop will be the primary applications used. Familiarity with the Macintosh is helpful but not essential.]

#### THETR 319 Music, Dance, and Light

Fall. 3 credits. Attendance at dance concerts and music concerts is required. E. Intemann and A. Fogelsanger, J. Morgenroth.

Artistic values, parameters, and concerns of music (sound design), dance, and lighting design are compared and contrasted, and the combination of design elements is analyzed in contemporary dance. Includes writing in response to readings, audio and video recordings, and performances. Some classes devoted to creating sound, movement, and lighting.

#### THETR 343 Costume History: From Fig Leaf to Vanity

Fall. 3 credits. Limited to 20 students. C. Orr Brookhouse.

Costume History will offer an overview of the history of clothing from the first signs of clothing to the early 20th century. It will investigate personal, social, religious, political, and regional reasons for why and how clothing evolved.

#### THETR 362 Lighting Design Studio I: Lighting in the Performing Arts

Fall. 4 credits. Prerequisite: THETR 250 or permission of instructor. Limited to 6 students. E. Intemann.

The theory and practice of lighting design as a medium for artistic expression. This course will explore the aesthetic and mechanical aspects of light and their application in the theatre. Artistic style and viewpoint will also covered.

#### THETR 364 Scenic Design Studio

Fall. 3 credits. Limited to 10 students. Prerequisite: THETR 250 and 340 or permission of instructor. K. Goetz.

An exploration of the process of designing scenery for the live theatre. Projects will employ various media to explore dramatic use of architecture, the scenic space, and elements of interior design. Experience in theatre production and graphic skills is helpful but not essential. Students are required to purchase materials which the instructor will specify (approximate cost: \$50.00).

#### THETR 366 Costume Design Studio

Spring. 3 credits. Students are required to purchase materials which the instructor will specify (approximate cost: \$50.00). Limited to 10 students. J. Johnson.

Design of costumes for the theatre, concentrating on script and character analysis, period research, design elements, figure drawing and rendering skills, and an understanding of production style. May be repeated for credit.

#### THETR 368 Sound Design Studio

Spring. 4 credits. Limited enrollment to 6 students. Prerequisite: THETR 250 or 252 or permission of instructor. Students are required to purchase supplies (approximate cost \$20.00). C. Hatcher.

The use of sound as a medium of design for the theatre; research and creation of the theatrical sound score, digital recording and basic audio engineering techniques with projects in post production studio engineering and live recording. Emphasis is on producing viable sound designs for live theatre events.

#### THETR 462 Lighting Design Studio II

Spring. 4 credits. Prerequisite: THETR 362 or permission of instructor. Limited to 6 students. E. Intemann.

This course concentrates on designing lighting for different genres in various venues, developing the lighting designer as a versatile artist. Personal style and artistic commitment will be stressed.

### Technology

#### THETR 252 Technical Production Studio I

Fall. 3 credits. Limited to 6 students. D. Hall and J. Zornow.

Stage Lighting and Sound Technology: the practical aspects of lighting and sound technology including equipment setup, engineering, electrics, organization, recording techniques, and production paperwork will be explored through projects, lectures, and class discussions. In addition to twice-weekly class meetings the course requires a laboratory commitment of fifty hours for the semester.

#### [THETR 254 Theatrical Make-up Studio

Fall. 3 credits. Students are required to purchase make-up kits which the instructor will provide (approximate cost \$50.00). Limited to 12 students. Not offered 1998-99. J. Johnson.

Basic techniques of make-up for the stage including corrective, old age, and fantasy; use of prosthetics, wigs, hair and hairpieces.]

#### THETR 256 Technical Production Studio II

Spring. 3 credits. Limited to 6 students. Students are required to purchase materials, which the instructor will specify (approximate cost \$25.). Prerequisite: THETR 250 or permission of instructor. Additional hands-on time in prop and paint shops required, to be discussed. N. Cross and M. Melita.

**Scene Painting:** introduction to the basic techniques of painting scenery, including but not limited to the layout and painting of bricks, marble, stone, and wood grain for the theatre. Individual projects in scene painting and participation on paint crew for productions are included. **Stage Properties:** introduction to the processes of propmaking, including furniture construction and upholstery techniques, use of shop tools and materials, period research, and painting and finishing.

#### THETR 340 Theatrical Drafting and Technical Drawing Studio

Fall. 3 credits. Limited to 6 students. Prerequisite: THETR 250 or permission of instructor. S. Brookhouse.

Implementation of the fundamentals of drafting and technical drawing. Introduction of the concept of an individual style in the approach to drafting for the theatre. A series of projects to familiarize students with the convention and process of visualization and drafting.

#### THETR 352 Themed Entertainment: The Technical Perspective

Fall. 3 credits. Limited to 12 students. R. Archer.

Exploration into the integration of art and science in today's theme parks and interactive entertainment attractions. Papers, projects, and discussions will deal with planning and development aspects of large-scale entertainment projects including architecture, engineering, construction, and attraction installation. Focus will be on the specialized entertainment technologies that make these attractions work: audio and lighting design, ride and show control systems, and special effects.

#### THETR 354 Stagecraft Studio

Fall. 3 credits. A minimum of one credit of production laboratory (THETR 151 or 251) is strongly recommended concurrently. Prerequisite: THETR 250 or permission of instructor. R. Archer.

An exploration of the techniques and practice of theatre operation, scenic construction, stage mechanics, rigging, painting, and model building.

#### THETR 356 Costume Construction Studio

Spring. 3 credits. A minimum of one credit of production laboratory (THETR 151 or 251) is strongly recommended concurrently. Prerequisite: THETR 250 or permission of instructor. Lab fee of \$25 to be paid in class. C. Orr Brookhouse.

A project/lecture/discussion class in costume research, patterning, cutting, construction, and fitting.

**THETR 358 Costume Draping Studio**

Fall. 3 credits. Prerequisite: THETR 356 or permission of instructor. J. Johnson.  
The course will provide further experiences in the area of costume construction, particularly in the specialized area of patterning. Students will learn to make patterns by the method of draping on the form and will conclude the class by building a complete costume (from inside out) using that method of patterning.

**Stage Management****THETR 153 Stage Management Production Laboratory I**

Fall and spring. 1-2 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium Theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes. Prerequisite: permission of instructor. P. Lillard.  
Practical experience in theatrical production as assistant stage manager for a dance theatre concert or as a stage manager for readings, Black Box lab productions, or S.L.T.C. under the supervision of the faculty production manager. THETR 370 complements this course.

**THETR 253 Stage Management Laboratory II**

Fall and spring. 1-4 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes. Prerequisite: permission of instructor. P. Lillard.  
Practical experience in theatrical production as assistant stage manager for a season production under the supervision of the faculty production manager. THETR 370 complements this course.

**THETR 353 Stage Management Laboratory III**

Fall and spring. 1-4 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium Theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes. Prerequisite: permission of the instructor. P. Lillard.  
Practical experience in theatrical production as stage manager for a dance theatre concert, or an AUTP production. Under the supervision of the faculty production manager. THETR 370 complements this course.

**THETR 370 Stage Management Studio**

Fall. 2 credits. Prerequisite: THETR 250 or 280. P. Lillard.  
Introduction to the concepts and techniques of stage management as they relate to specific areas of production. Development of relevant communication skills and an understanding of the production process as experienced by a working stage manager or assistant stage manager. THETR 153, 253, and 353 complement this course.

**THETR 453 Stage Management Laboratory IV**

Fall and spring. 1-5 credits. May be repeated for credit. Prerequisite: admission to Advanced Undergraduate Theatre Program. P. Lillard.  
Practical experience in theatrical production as stage manager for a season production under the supervision of the faculty production manager.

**Production Laboratories****THETR 151 Production Laboratory I**

Fall and spring. 1-3 credits. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the CTA Proscenium Theatre. P. Lillard, S. Brookhouse, N. Cross, M. Melita, J. Zornow, C. Orr Brookhouse.  
This course provides practical experiences in theatrical production. Students can work on scenery, costumes, properties, lighting, or stage crew. No prerequisites or experience required.

**THETR 251 Production Laboratory II**

Fall and spring. 1-3 credits. Prerequisite: permission of instructor. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the CTA Proscenium Theatre. P. Lillard, S. Brookhouse, D. Hall, C. Hatcher, C. Orr Brookhouse, J. Zornow.  
Practical experience in theatrical production, as a light board operator, sound board operator, sound technician, head dresser or scenery/props special project.

**THETR 351 Production Laboratory III**

Fall and spring. 1-3 credits. May be repeated for credit. Prerequisite: permission of instructor. P. Lillard, R. Archer, S. Brookhouse, K. Goetz, D. Hall, E. Intemann, J. Zornow, C. Hatcher, J. Johnson, C. Orr Brookhouse.  
Practical experience in theatrical production as a master electrician, assistant technical director, assistant costume shop manager or assistant to a faculty or guest director or designer.

**THETR 451 Production Laboratory IV**

Fall and spring. 1-4 credits. May be repeated for credit. Prerequisite: admission to Advanced Undergraduate Theatre Program. P. Lillard, R. Archer, S. Brookhouse, K. Goetz, D. Hall, C. Hatcher, J. Johnson, E. Intemann, C. Orr Brookhouse.  
Practical experience in theatrical production, in the position of designer, shop manager, technical director or sound engineer.

**Independent Study, Internships and Honors****THETR 300 Independent Study**

Summer, fall, or spring. 1-4 credits.  
Independent Study in the Theatre allows students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course, must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study which is available in 225 CTA.

**THETR 485 Undergraduate Internship**

Fall, spring, or summer. 1-3 credits.  
To be eligible to enroll and receive credit for an internship, students must either be majors or be concentrators in the department. Students are responsible for arranging their own internships in consultation with the faculty in their area of choice prior to preregistration for the semester in which the internship is planned to take place. To receive credit within this course, the intern-

ship must be unpaid. Students must follow the rules and procedures stated in the departmental internship form.

**THETR 495 Honors Research Tutorial**

Fall or spring. 2-8 credits. Limited to Theatre Arts seniors only.  
This course is the first of a two-semester sequence (the second is THETR 496). Up to eight credit hours and one grade will be given upon completion of the second semester. The Theatre Arts honors program is for majors who have demonstrated exceptional ability in the major and who seek an opportunity to explore branches of their subject not represented in the regular curriculum or to gain experience in original research. To be a part of the honors program the student must maintain an average of 3.5 in departmental courses and an average of 3.0 in all courses. Students should consult with their advisers in their junior year if deciding to do honors. Admissions to honors is at the discretion of the departmental committee.

**THETR 496 Honors Thesis Project**

Fall or spring. 2-8 credits. Limited to Theatre Arts seniors only.  
This course is the second of a two-semester sequence (the first is THETR 495). Up to eight credit hours and one grade will be given upon completion of the second semester. See THETR 495 for further information.

**Film****THETR 274 Introduction to Film Analysis: Meaning and Value**

Spring. 4 credits. Limited to thirty-five students. **Note:** this course is normally given in the fall; offered spring 1999, it will be offered next in fall 1999.  
D. Fredericksen.  
An intensive consideration of the ways films generate meaning and of the ways we attribute meaning and value to films. Discussion ranges over commercial narrative, documentary, and personal film modes. Prospective film majors should enroll in their sophomore year.

**THETR 275 Introduction to Film Theory**

Spring. 4 credits. No prerequisites, strongly recommended for film majors.  
A. Villarejo.  
This course provides an introduction to critical and theoretical approaches to film over the past century. It surveys questions of form, genre, aesthetics, narrative, spectatorship, industry, authorship, and apparatus through readings and weekly screenings of films key to these theoretical and critical formulations. The second half of the course will be devoted to the major theoretical trajectories of the past few decades in the humanities more generally and in their specific relations to cinema: structuralism and semiotics, Marxism, psychoanalysis, feminist theory, poststructuralisms, postcolonial theory and queer theory.

**THETR 277 Video Production I**

Spring, alternate years and occasionally in summer. 3 credits. Limited to 12 students. Permission of instructor. Open to sophomores, juniors, and seniors.  
M. Rivchin.  
A hands-on, beginning video production course using Super-VHS cameras and editing equipment. Students will learn camera, lighting, sound recording, editing and digital



effects through a series of technical exercises. Students will develop two short, original video projects to be shown publicly at the end of the semester. A \$100 equipment maintenance fee per student will be collected in class. Cost for videotape approximately \$50–100.

**THETR 291 Filming Other Cultures**  
(also **Thetr 691 and Anthropology 291/691**) @

Spring. 4 credits. Limited to 20 students, with preference given to those who have taken either Anthropology 102 or Theatre Arts 274. Fee for screening and maintenance, \$35. R. Ascher.

THETR 291 meets simultaneously with THETR 691/ANTRO 291/691. For topics and issues addressed, please see the description under Anthropology 291. Additionally, all graduate students review widely distributed films of general interest, for example, Werner Herzog's *Where the Green Ants Dream*, and, in consultation with the instructor, review films related to their special interests and major field of study.

**[THETR 313 Japanese and Asian Film**  
(also **Asian Studies 313 and Comparative Literature 313**) @

Spring. 4 credits. Not offered 1998–99. B. de Bary.

For description, see ASIAN 313.]

**[THETR 329 Political Theory and Cinema**  
(also **German Studies 330, Comparative Literature 330 and Government 370**)

Fall. 4 credits. Not offered 1998–99. G. Waite.

For description, see German Studies 330.]

**THETR 375 History and Theory of the Commercial Narrative Film**

Fall. 4 credits. Fee for screening expenses, \$10 (paid in class). Offered alternate years. Prerequisite for film majors THETR 274. A. Villarejo.

Consideration of the broad patterns of narration in the history of the commercial narrative film. Emphases placed upon the early articulation of a cinematic means of narration, realism as an artistic style, the nature and functions of popular film, and the modes of modernist and post-modernist "art cinema" narration.

**[THETR 376 History and Theory of Documentary and Experimental Film**

Fall. 4 credits. Fee for screening expenses, \$10 (paid in class). Prerequisite: THETR 274 is strongly recommended, but not required. Offered alternate years, next offered fall 1999. A. Villarejo.

First, the history and theory of documentary film up to the end of World War II. Second, the history and theory of the experimental and personal film forms in Europe and the United States.]

**THETR 377 Fundamentals of 16mm Filmmaking**

Fall. 4 credits. Limited to 12 students. Intended for juniors and seniors (who may need to sign up a year or more in advance) with priority given to film majors. Prerequisite: THETR 274 (or higher-level film studies course) and permission of instructor. Equipment fee, \$100 (paid in class). The average cost to each student for materials and processing is \$400. M. Rivchin.

A hands-on course in the basics of 16mm filmmaking techniques, requiring no prior

production experience, emphasizing creative development of filmic ideas through critical discussion. Students may explore narrative, experimental, documentary, animation, and abstract genres, producing short exercises and a final sound film project (8–12 minutes) to be screened publicly.

**[THETR 378 Soviet Film of the 1920s and French Film of the 1960s**

Spring. 4 credits. Fee for screening expenses, \$10 (paid in class). Prerequisite: THETR 375 is strongly recommended, but not required. Offered alternate years.

Next offered spring 2001. D. Fredericksen.

An intensive treatment of two distinct periods of radical innovation in film theory and history. Emphasis on the animated relationship between theory and filmmaking during these two decades. Major figures include Eisenstein, Pudovkin, Vertov, Kuleshov, Dovzhenko, and Room, in the Soviet 1920's; Godard, Truffaut, Resnais, Rohmer, Tati, Rouch, Bresson and Bazin in the French 1960's.]

**[THETR 379 Modern Documentary Film**

Spring. 4 credits. Prerequisite: THETR 376 is strongly recommended but not required. Fee for screening expenses, \$10 (this fee is paid in class). Offered alternate years, next offered spring 2000. D. Fredericksen.

An intensive consideration of canonical documentary films from 1945 to the present. Emphases upon the documentary film as an artistic form with a distinct history and set of theoretical questions, as a sociopolitical force, as an ethnographic medium within and without a filmmaker's culture, and as a televised medium of persuasion and expression.]

**THETR 383 Screenwriting**

Spring. 3 credits. Prerequisites: THETR 274 and 377, and permission of instructor. Limited to 12 students. R. Wilson.

Exercises in various genres of screenwriting will be explored: the commercial narrative, documentary, experimental, and abstract. This class will culminate in the writing of a finished script for a ten to fifteen-minute film. Note: this class is an intensive writing experience that will demand a great deal of outside work.

**[THETR 386 Third Cinema**

Spring. 4 credits. Prerequisite: previous course in film history or analysis helpful, though not mandatory. Not offered 1998–99. A. Villarejo.

This course explores postcolonial film and video through the rubric of "third cinema." We will investigate the diverse historical, national, political and generic commitments of films from Africa, South Asia, Latin America, the US and UK (Sembene, Ray, Brocka, etc.). Readings in film and postcolonial theory will guide our critical analyses of the films.]

**THETR 391 Media Arts Studio I (also ART 391, ARCH 391, MUSIC 391)**

Fall. 3 credits. Prerequisite: permission of instructor and junior-level standing required, minimum THETR 377 or 277, or dance studio courses. \$50 equipment fee (to be paid in class). Participating faculty include: M. Rivchin and B. Suber, THETR; S. Taft and S. Bowman, ART; K. Hubbell, J. Zissovica and G. Wilcox, ARCH; D. Borden, MUSIC.

A collaborative interdisciplinary studio course in a variety of digital and electronic media, including art, architecture, music, dance, film and video. Group projects and discussions will also investigate the artistic and interactive potential of a high-speed intranet connecting arts spaces on campus, including virtual and performative events.

**THETR 392 Media Arts Studio II (also ART 392, ARCH 392, MUSIC 392)**

Spring. 3 credits. Preference given to those who completed Media Arts Studio I. See THETR 391 for prerequisites. \$50 equipment fee (to be paid in class). Participating faculty include: M. Rivchin and B. Suber, THETR; S. Taft and S. Bowman, ART; K. Hubbell, J. Zissovica and G. Wilcox, ARCH; D. Borden, MUSIC.

A continuation of Media Arts Studio I. A collaborative interdisciplinary studio course in a variety of digital and electronic media, including art, architecture, music, dance, film and video. Group projects and discussions will also investigate the artistic and interactive potential of a high-speed intranet connecting arts spaces on campus, including virtual and performative events.

**THETR 395 Video: Art, Theory, Politics (also English 395)**

Fall. 4 credits. T. Murray.

For description, see English 395.

**[THETR 396 German Film (also Comparative Literature 396 and German Studies 396)]**

Spring. 4 credits. Requirements: participation in class discussion, one paper, midterm, and final. Not offered 1998–99. D. Bathrick.

This course will explore German film from the Weimar and Nazi periods to the present in relation to the cultural and sociopolitical context of which it was a part. Readings and lectures will be devoted to formal and cultural developments historically as well as interpretive analysis of selected individual films.]

**[THETR 413 Film and Performance**

Spring. 4 credits. Prerequisite: at least one production course in 16mm film or video, and/or at least one 300-level course in acting or directing. Permission of the instructors. Limited to 12 students. \$50 maintenance fee to be collected in class. Not offered 1998–99. M. Rivchin and faculty.]

**THETR 473 Film and Spiritual Questions (also Religious Studies 473 and College Scholar Seminar)**

Spring. 4 credits. Limited to 20 students. Offered alternate spring semesters; next offered spring 1999. D. Fredericksen.

The use of film as a medium for the expression of spiritual questions has a long and rich history, although little attention is given to this fact in contemporary film studies. This seminar will examine films and writings by filmmakers who are so inclined. Special attention will be given to the work of Andrei Tarkovsky, the Russian film director and theorist.

**[THETR 474 Jung, Film, and the Process of Self-knowledge (also College Scholar Seminar)]**

Spring. 4 credits. Limited to 20 students. Offered alternate spring semesters; not offered 1998–99; next offered spring 2000. D. Fredericksen.

"Know thyself" is one of the oldest and most enduring imperatives of the human spirit, and a *raison d'être* for liberal studies. This seminar will trace the Jungian approach to this imperative and test its critical capacities with respect to films by Fellini (*8 1/2*), Bergman (*Persona*), and Roeg (*Walkabout*).]

**[THETR 475 Seminar in the Cinema I]**

Fall. 4 credits. Limited to 20 students. Offered alternate years. Prerequisite: some analytic studies in film analysis. Not offered fall 1998; next offered fall 1999. D. Fredericksen.

Topic for fall 1999: the films of Ingmar Bergman. An intensive consideration of Bergman's corpus, with emphasis upon the films of the middle and end of his career. As well, close attention will be given to the nature of the critical act and its relationship to biography, film history, and film theory.]

**[THETR 476 Seminar in the Cinema II]**

Spring. 4 credits. Limited to twenty students. Not offered 1998-99. Faculty.]

**THETR 477 Intermediate Film and Video Projects**

Fall. 4 credits. Limited to 8 students. Prerequisites: THETR 377 or 277 as minimum; preference given to those who have taken THETR 383 (screenwriting), 398 (directing), or 413 (acting and directing for the camera), and permission of instructor. Equipment fee: \$100 to be collected in class. Film projects costs: \$300-1000; video \$50-150. M. Rivchin.

16mm filmmaking and video skills course designed to increase the student's knowledge and practice of: cinematography, lighting, sync-sound filming and editing techniques; working with labs and sound houses; S-VHS and digital video camera; and both analog and non-linear (AVID) editing. Each student will write, direct, shoot and edit one original short, sync-sound scene and one experimental project.

**THETR 493 Advanced Film and Video Projects**

Spring. 4 credits. Limited to 4-6 students, those selected to the Advanced Undergraduate Film Program by application in December. Prerequisite: THETR 377 or 277, and 477; recommended: 383 (screenwriting) and 398 (Directing 1). Equipment fee: \$100. Project costs: \$500-2000. M. Rivchin.

This is a third-level film production course for those students who have already written and proposed a dramatic narrative script, a documentary treatment, or an experimental or animation storyboard. Working in two production crews rotating as directors, cinematographers, and sound recordists' students may shoot in sync-sound, film, or video. Students will edit the films they write and direct, and will be individually responsible for editing and all completion costs of their projects, which will be screened publicly at the end of the semester.

**[THETR 653 Myth onto Film]**

4 credits. Not offered 1998-99. R. Ascher. For description, see ANTHR 653.]

**THETR 674 Introduction to Film Analysis: Meaning and Value**

Spring. 4 credits. Limited to 10 graduate students. D. Fredericksen.

An intensive consideration of the ways films generate meaning and of the ways we

attribute meaning and value to films.

Discussion ranges over commercial narrative, documentary, and personal film modes. Graduate students who intend to teach film at the undergraduate level are especially welcome. In addition to full participation in the work of THETR 274, graduate students will read and discuss Bordwell's *Making Meaning: Inference and Rhetoric in the Interpretation of Cinema*.

**THETR 691 Filming Other Cultures (also Theatre 291 and Anthro 291/691) @**

Spring. 4 credits. Fee for film screening and maintenance, \$35. R. Ascher. THETR 691 meets simultaneously with THETR 291/ANTRO 291/691. For topics and issues addressed, please see the description under Anthropology 291. Additionally, all graduate students review widely distributed films of general interest, for example, Werner Herzog's *Where the Green Ants Dream*, and, in consultation with the instructor, review films related to their special interests and major field of study.

**[THETR 699 German Film Theory (also German Studies 699 and Comparative Literature 699)]**

Fall. 4 credits. Offered every fourth year. Not offered 1998-99. D. Bathrick. This course examines critically major German film theories from the Weimar period to the present. Works by Balazs, Arnheim, Kraeuer, Benjamin, Adorno, Horkheimer, Kluge, Syberberg, Koch, Elsaesser, and others will be discussed in relation to the context in which they emerge as well as current debates in film theory.]

## Dance

Classes in Ballet (THETR 123, 231, 304), Modern Dance (THETR 124, 232, 306, 308), Explorations (THETR 233), and the movement sections of Indian Dance (THETR 307, 317) are co-listed in the Department of Physical Education (PE) and the Department of Theatre, Film & Dance (THETR). Students may register for these classes either through PE in order to satisfy the university's physical education requirement or through THETR for 0 or 1 academic credit, *with a limit of 1 credit per semester and 8 credits total*. Students may not get THETR and PE credit simultaneously for the same course.

## Technique

These courses may be used to fulfill the technique class corequisite for THETR 201, 210, 310, 311, 410, 411.

**THETR 123 Ballet I (also Physical Education 423)**

Fall. 0 or 1 credit. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. B. Suber. The fundamentals of classical ballet technique. Material covered includes all of the exercises at the barre, basic centre exercises and elementary work in the areas of port de bras, adage, and petite and grande allegro. The acceleration of the class is determined by the ability of the majority of the class.

**THETR 124 Modern Dance I (also Physical Education 424)**

Fall and spring. 0 or 1 credit. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. Fall: J. Kovar and J. Morgenroth. Spring: J. Chu and J. Morgenroth.

The fundamentals of modern dance technique. Elementary dance movement phrases, with attention to rhythm, placement, and vitality of performance.

**THETR 231 Ballet II (also Physical Education 431)**

Fall and spring. 0 or 1 credit. Prerequisite: permission of instructor. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. B. Suber. An intermediate ballet class with intermediate work in the areas of port de bras, adage and petite and grande allegro.

**THETR 232 Modern Dance II (also Physical Education 432)**

Fall and spring. 0 or 1 credit. Prerequisite: Modern Dance I or permission of instructor. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. Fall: J. Chu. Spring: J. Morgenroth.

A continuation of Modern Dance I, for students with at least a year of dance training. Practice of longer dance phrases, with attention to clarity of design, rhythm, and expression.

**THETR 304 Ballet III (also Physical Education 434)**

Spring. 0 or 1 credit. Prerequisite: permission of instructor. May be repeated for credit. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. B. Suber. Study and practice of classical ballet at an advanced level. Work is done on strengthening the body through harmonic muscular control combining Russian, Danish and American techniques.

**THETR 306 Modern Dance III (also Physical Education 436)**

Fall and spring. 0 or 1 credit. May be repeated for credit. Prerequisite: Modern Dance II or permission of instructor. Satisfies PE requirement if taken as PE. Attendance at dance concerts is required. Fall: J. Chu. Spring: J. Morgenroth.

Advanced work with rhythm, placement, and phrasing for students who are prepared to refine technical skills of dancing. Students will be physically and mentally challenged by lengthy, complex phrases and will be expected to bring the instructor's material to life.

**THETR 308 Modern Dance IV (also Physical Education 438)**

Fall and spring. 0 or 1 credit. May be repeated for credit. Prerequisite: Modern Dance III or permission of instructor. Satisfies PE requirement if taken as PE. Attendance at dance concerts is required. Fall: J. Self. Spring: J. Chu.

A continuation of, and supplement to, THETR 306.

## Composition, Improvisation, and Performance

### THETR 155 Rehearsal and Performance

Fall and/or spring. 1-2 credits. 1 credit per production experience per semester up to 2 credits per semester. Students must register for the course in the term in which the credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the dance program's auditions. Students may add this course only after they have been assigned roles. S-U grades only.

The study, development, and performance of roles in departmental dance productions.

### THETR 201 Dance Improvisation

Fall. 3 credits. Limited to 12 students. Concurrent enrollment in a dance technique class at the appropriate level is required. Attendance at dance concerts is required. J. Chu.

When the body knows when, where, and how to move without prior direction, we call that improvisation. This course offers the possibility of "training" one's movement in instincts to respond with lightness, humor, grace, and spontaneity. Solo and group forms are covered. Includes some dance history.

### THETR 210 Beginning Dance Composition

Fall and spring. 3 credits. Concurrent enrollment in THETR 212 and a dance technique class at the appropriate level is required. Attendance at dance concerts is required. J. Morgenroth.

Weekly assignments in basic elements of choreography. Students compose and present short studies that are discussed and reworked. Problems are defined and explored through class improvisations. Informal showing at end of semester.

### [THETR 211 Dance Movement Workshop

Summer. 3 credits. Limited to 15 students. For students with varied levels of training, including those with no experience. Not offered summer 1998. J. Kovar.

Students explore new ways of moving and creating dances and prepare short studies each week based on material covered in class. Modern dance technique, improvisation, and composition are covered. Students observe and discuss the main concerns of contemporary performance from the artist's/performer's perspective. Viewings of films, videotapes, and live performances.]

### THETR 212 Music Resources for Dance Composition

Fall and spring. 1 credit. MUSIC 105 is recommended as a prerequisite but not required. Students may register in successive semesters, for a maximum of 4 credits. Attendance at dance concerts and music concerts is required. A. Fogelsanger.

Intended to expand choreographers' music vocabulary and skills through a survey of contemporary music for dance, the study of music and dance collaborations, and rhythm studies. Includes discussing and writing about concerts, recordings, and videotapes. May include rehearsing and performing music or dance. Syllabus varies depending on the students' experience.

### THETR 233 Explorations in Movement and Performance (also Physical Education 440)

Fall. 0 or 1 credit. Limited to 16 students. Satisfies PE requirement if taken as PE. Attendance at dance concerts is required. J. Self.

A physically demanding exploration into various movement realms. Specific subjects covered are genderized movement, erotic power, spiritual power, ritual and performance. Techniques include extensive use of breath, animal movement, improvisation, and group games. This course requires an eagerness to investigate the nature of performance and explore unfamiliar territory in movement.

### THETR 310 Intermediate Dance Composition I

Fall and spring. 3 credits. Prerequisite: THETR 210. Concurrent enrollment in THETR 212 and a technique class at the appropriate level is required. Fall: J. Self. Spring: J. Chu.

Intermediate choreographic projects will be critiqued in progress by faculty and peers. Consideration of design problems in costuming and lighting.

### THETR 311 Intermediate Dance Composition II

Fall and spring. 3 credits. Prerequisite: THETR 310. Attendance at dance concerts is required. Concurrent enrollment in THETR 212 and a dance technique class at the appropriate level is required. Fall: J. Self. Spring: J. Chu.

A continuation of THETR 310.

### THETR 410 Advanced Dance Composition I

Fall and spring. 3 credits. Prerequisite: THETR 311. Concurrent enrollment in THETR 212 and in a technique class at the appropriate level. Attendance at dance concerts is required. Fall: J. Self. Spring: J. Chu.

Students work on advanced choreographic problems, to be presented in performance. Work in progress will be critiqued by faculty on a regular basis.

### THETR 411 Advanced Dance Composition II

Fall and spring. 3 credits. Prerequisite: THETR 410. Concurrent enrollment in THETR 212 and in a technique class at the appropriate level. Attendance at dance concerts is required. Fall: J. Self. Spring: J. Chu.

A continuation of THETR 410.

### THETR 491 Senior Project in Dance

Fall or spring. 4 credits. Prerequisite: THETR 410 or permission. This course is limited to senior dance majors only.

Students who take this course will create a project in choreography and performance, dance film or video, dance pedagogy, or other appropriate area agreed upon with a member of the dance faculty. Senior projects that are to be performed, must be presented within one of the three regularly scheduled department concerts.

## History, Criticism, and Theory

### THETR 307 Asian Dance and Dance Drama (also Physical Education 427) @

Sec. 01. Indian Dance. Sec. 02. Japanese Noh Theatre. Not offered 1998-99. Sec. 03. Indonesian Dance Theatre. Not offered 1998-99.

This course is designed to give the student a practical working knowledge of Indian classical dance, specifically in the indigenous style of Orissa known as Odissi. The technique strengthens the body and develops grace, rhythmic expression, and dexterity that can benefit all forms of dance.

### [THETR 312 Physical Analysis of Movement

3 credits. Not offered 1998-99. J. Morgenroth.

This course is an examination of human movement with particular attention to dance movement. Readings in texts on human anatomy, physiology, and kinesiology and in Sweigard's *Human Movement Potential*. Guest lectures by experts in anatomy and health areas. Practical and laboratory work. Demonstration of dissection.]

### [THETR 314 Western Dance History I: Classical Ballet History as a Reflection of Western Ideology #

4 credits. Attendance at dance concerts is required. Not offered 1998-99.

A critical survey of the history of classical ballet defining elements of classicism and determining why ballet is defined as classical. Texts, videotapes, and through live performance, the class will explore how ballet has perpetuated or confronted social issues of race, class, gender, sexuality, the body, and abuse.]

### [THETR 315 Western Dance History II: History of Modern Dance

4 credits. Attendance at dance concerts is required. Not offered 1998-99.

This class will study the course of modern dance in the twentieth-century United States. We will examine each generation of dancers, starting with Isadora Duncan and ending with performers emerging today. Issues of gender, cultural identity, elitism, and democracy will be discussed.]

### [THETR 317 Asian Dance II

0, 1 or 3 credits. Prerequisite: THETR 307 or previous training in Odissi Classical Dance. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. Not offered 1998-99.

The continuation of THETR 307, Odissi Classical Dance. Emphasis is mainly on choreography as well as continuing to refine and perfect the basic movements learned in the preliminary course. Meets twice weekly for movement classes; an extra class will be arranged to learn the art of makeup.]

### THETR 319 Music, Dance, and Light

Fall. 3 credits. Attendance at dance concerts and music concerts is required. E. Intemann, A. Fogelsanger, J. Morgenroth.

Artistic values, parameters, and concerns of music (sound design), dance, and lighting design are compared and contrasted, and the combination of design elements is analyzed in contemporary dance. Includes writing in response to readings, audio and video recordings, and performances. Some classes devoted to creating sound, movement, and lighting.

**THETR 418 Seminar in History of Dance @**

Spring. 4 credits. Attendance at dance performances is required. B. Suber.  
Topic for 1999: Digital Dance.

**THETR 490 Senior Paper in Dance**

Spring. 4 credits. Prerequisite: THETR 418, senior standing. Attendance at dance concerts is required.

Under faculty direction, the student will write a senior paper in dance history, criticism, or theory.

**Tracks toward admission into the advanced undergraduate theatre program****Design, Technology, and Stage Management**

Recommended for individuals interested in a **Design, Technology, or Stage Management** track:

**THETR 250** Fundamentals of Theatre Design and Technology

**THETR 151 and 251** Production Lab I and II (at least one credit of each)

Recommended for Scenic Design emphasis:

**THETR 340** Theatrical Drafting and Technical Drawing Studio

**THETR 351** Production Lab III (as Design Assistant)

**THETR 354** Stagecraft Studio

**THETR 364** Scene Design Studio

Upon admission to the program: **THETR 451** Production Lab IV (at least 1 credit)

Recommended for costume design or costume shop management emphasis:

**THETR 254** Theatrical Make-up Studio

**THETR 351** Production Lab III (as Design Assistant)

**THETR 356** Costume Construction Studio

**THETR 366** Costume Design Studio I

Upon admission to the program: **THETR 451** Production Lab IV (at least 1 credit)

Recommended for Lighting Design or costume shop management emphasis:

**THETR 252** Technical Production Studio I

**THETR 351** Production Lab III (as Student Electrician)

**THETR 351** Production Lab III (as Design Assistant)

**THETR 362** Lighting Design Studio I

Upon admission to the program: **THETR 451** Production Lab IV (at least 1 credit)

Recommended for Sound Design emphasis:

**THETR 251** Production Lab II (as Student Sound Technician)

**THETR 252** Technical Production Studio I

**THETR 351** Production Lab III (as Design Assistant)

**THETR 368** Sound Design Studio

Upon admission to the program: **THETR 451** Production Lab IV (at least 1 credit)

Recommended for Technical Direction emphasis:

**THETR 252** Technical Production Studio I

**THETR 256** Technical Production Studio II

**THETR 340** Theatrical Drafting and Technical Drawing Studio

**THETR 351** Production Lab III (as Assistant Technical Director)

**THETR 354** Stagecraft Studio

Upon admission to the program: **THETR 451** Production Lab IV (at least 1 credit)

Recommended for Stage Management emphasis:

**THETR 253** or **353** Stage Management Lab II or III—two assignments

**THETR 280** Introduction to Acting

**THETR 370** Stage Management Studio

**THETR 398** Fundamentals of Directing I

Upon admission to the program: **THETR 453** Stage Management Lab IV

**Directing**

Recommended for individuals interested in a directing track:

**THETR 151** and **THETR 251** Production Lab I and II (at least 2 combined credits)

**THETR 240/THETR 241** Introduction to Western Theatre (1 Semester ONLY)

**THETR 250** Fundamentals of Design and Technology

**THETR 280** Introduction to Acting

**THETR 398** Directing I

**THETR 498** Directing II

**Playwriting**

Recommended for individuals interested in a playwriting track:

**THETR 240/THETR 241** Introduction to Western Theatre (1 Semester ONLY)

**THETR 250** Fundamentals of Design and Technology

**THETR 280** Introduction to Acting

**THETR 348** Playwriting

**THETR 349** Advanced Playwriting

Students in the advanced undergraduate theatre program may also elect to take **THETR 485** (Undergraduate Internship) in addition to or in place of one production assignment.

**UKRAINIAN**

See Language Courses under Modern Languages.

**URDU**

See Language Courses (under "Hindi") under Modern Languages.

**VIETNAMESE**

See Language Courses under Modern Languages.

**WELSH**

See Language Courses under Modern Languages.

**WOMEN'S STUDIES MAJOR**

See under "Special Programs and Interdisciplinary Studies."

**WRITING PROGRAM**

See under John S. Knight Writing Program in the section, "Special Programs and Interdisciplinary Studies."

**YIDDISH**

See under Department of Near Eastern Studies.

**SPECIAL PROGRAMS AND INTERDISCIPLINARY STUDIES****Africana Studies and Research Center**

J. Turner, director (255-5218); A. Adams, N. Assie-Lumumba, A. Bekerie, L. Edmondson, R. Harris, S. Hassan, A. Kemp, A. Mazrui, A. Nanji, D. Ohadike. Offices: 310 Triphammer Road, 255-4625 or 255-4626.

The Africana Studies and Research Center is concerned with the examination of the history, culture, intellectual development, and social organization of Black people and cultures in the Americas, Africa, and the Caribbean. Its program is structured from an interdisciplinary and comparative perspective and presents a variety of subjects in focal areas of history, literature, social sciences, and African languages. African languages such as Swahili are consistently offered, while other languages, e.g., Mandinka and Yoruba are occasionally offered. African languages are also taught during summer/winter session.

The center offers a unique and specialized program of study that leads to an undergraduate degree through the College of Arts and Sciences and a graduate degree, the Master of Professional Studies (African and African-American), through the university's Graduate School.

A student may major in Africana studies; however, another attractive alternative is the center's joint major program. This program enables the student to complete a major in any of the other disciplines represented in the college while at the same time fulfilling requirements for a major in Africana Studies. This requires only a few more credits than is usually the case when one completes a single major course of study. Courses offered by the center are open to both majors and nonmajors and may be used to meet a number of college distribution requirements, including historical/temporal breadth (\*) and geographical breadth (©) requirements, such as freshman writing seminars, language (Mandinka, Swahili, Yoruba), expressive arts, humanities, social sciences, and history.

The center also brings distinguished visitors to the campus, sponsors a colloquium series, and houses its own library.

**The Africana Major**

The undergraduate major offers interdisciplinary study of the fundamental dimensions of the African-American and African experiences. Because of the comprehensive nature of the program, it is to the students' advantage to declare themselves Africana majors as early as possible. The following are prerequisites for admission to the major.

Students should submit:

- 1) a statement of why they want to be an Africana studies major;



- 2) a tentative outline of the area of study they are considering (African or African-American) for the undergraduate concentration; and
- 3) a full transcript of courses taken and grades received.

The center's undergraduate faculty representative will review the applications and notify students within two weeks of the status of their request.

After acceptance as a major in the Africana Center, a student must maintain a C+ cumulative average in the center's courses while completing the major program. The Africana major must complete 36 credits in courses offered by the center, to include the following four core courses: AS&RC 205, 231, 290, and 422. Beyond the core courses, the student must take 8 credits of center courses numbered 200 or above and 15 credits numbered 300 or above. The program of an undergraduate major may have a specifically Afro-American focus or a specifically African focus.

### Joint Majors

The center encourages joint majors in the College of Arts and Sciences and in other colleges. Joint majors are individualized programs that must be worked out between the departments concerned. The center's undergraduate faculty representative, Professor Adams, will assist students in the design and coordination of joint major programs. However, in any joint major program, the center will require at least 16 credits be taken in Africana studies courses, including AS&RC 290.

### Double Majors

In the case of double majors (as distinct from joint majors) students undertake to carry the full load of stipulated requirements for a major in each of the two departments they have selected.

### Certificate in African Studies

In conjunction with the Institute for African Development, the Africana Studies and Research Center administers an undergraduate Certificate in African Studies program. The certificate is offered as a minor concentration available to students in all of the undergraduate colleges at Cornell. Many of the courses in the program might be used to fulfill other course distribution requirements. By pursuing this certificate, students acquire an interdisciplinary understanding of Africa. After developing a foundation of knowledge on the culture, society, and development of Africa in the core course "Africa: The Continent and Its People," students pursue 15 credit hours in a humanities or development studies track or a combination of the two, including an additional core course, either "African Civilizations and Cultures" or "Contemporary African Development Issues." The requirements for the certificate are a minimum of 18 credit hours, including the core courses. Students interested in the certificate program must contact Professor Adams (the center's undergraduate faculty representative) who will register them in the program and assign them a faculty adviser from their own college. The faculty adviser will be responsible for determining completion of the certificate requirements.

**Honors.** The honors program offers students the opportunity to complete a library research thesis, a field project in conjunction with a report on the field experience, or a project or experiment designed by the student. The requirements for admission to the honors program for all students—regular majors, joint majors, and double majors—are a B- cumulative average in all courses and a B+ cumulative average in the center's courses. Each student accepted into the honors program will have an honors faculty committee consisting of the student's adviser and one additional faculty member, which is responsible for final evaluation of the student's work. The honors committee must approve the thesis or project before May 1 of the student's junior year. The completed thesis or project should be filed with the student's faculty committee by May 10 of the senior year.

### Distribution Requirement

Two Africana Studies and Research Center courses from the appropriate group may be used in fulfillment of the following distribution requirements:

Social sciences: AS&RC 171, 172, 190, 191, 208, 231, 280, 290, 344, 345, 346, 351, 352, 400, 410, 420, 451, 460, 478, 479, 481, 484, 485, 495, 550, 551.

History: AS&RC 203, 204, 205, 283, 344, 350, 360, 370, 380, 381, 405, 460, 471, 475, 482, 483, 490, 510.

Humanities: AS&RC 202, 210, 211, 219, 222, 304, 422, 425, 450, 455, 525.

Expressive arts: AS&RC 209, 285, 303, 310, 425, 430.

Freshman writing seminars: AS&RC 100.

### Language Requirement

Courses in Mandinka, Swahili, and Yoruba may be used to satisfy the College of Arts and Sciences language requirement. Successful completion of the Mandinka or Yoruba series AS&RC/DMLL 121, 122, 123 provides qualification, and study through 203 in either language provides proficiency. In Swahili, successful completion of AS&RC 131, 132, 133, and 134 provides qualification, and the addition of 204 provides proficiency. AS&RC majors are not required to take an African language, but the center recommends the study of one to complete the language requirement.

### Courses

#### AS&RC 123 Sec 01 Continuing Yoruba

Fall. V. Carstens and staff.  
For description, see YORUB 123.

#### AS&RC 131 Swahili

Fall. 4 credits. Laboratory time to be arranged. A. Nanji.  
Beginner's Swahili. Part 1—Grammar for speaking, reading, and writing. Requires no knowledge of language. Swahili is spoken in East and Central parts of Africa.

#### AS&RC 132 Swahili

Spring. 4 credits. Prerequisite: Swahili 131. A. Nanji.  
Continued study of the basic grammatical formation of the language and the introduction of reading material ranging from songs to short stories. A great many drills are invariably used in this course to help develop the student's comprehension of the language.

Swahili tapes are highly utilized during all of these sequences.

#### AS&RC 133 Swahili

Fall. 4 credits. Prerequisites: Swahili 131 and 132. Language laboratory time to be arranged. A. Nanji.  
Advanced study in reading and composition.

#### AS&RC 134 Swahili

Spring. 4 credits. Prerequisite: Swahili 133. A. Nanji.  
In this course of the sequence more emphasis is placed on the development of reading ability and the acquisition of writing skills. Students are expected to read and comprehend selected Swahili stories and write compositions on chosen topics. Ample consideration is given to oral practice in the classroom.

#### AS&RC 171 Black Families and the Socialization of Black Children

Fall. 3 credits. Faculty.  
This course provides an examination of the evolution of the Black family from its roots in Africa, the evolution of family forms, the impact of social policy, and a consideration of the literature stressing family and child well-being. Among the major topics considered will be male/female relationships, childbearing and parental roles, the extended family, economic and health issues. The component of the course focusing on youth will primarily cover child and adolescent development.

#### AS&RC 172 The Education of Black Americans: Historical and Contemporary Issues

Spring. 3 credits. Faculty.  
This course will be devoted to the history of educating Black Americans. Considerable attention will be given to contemporary issues. The major topics of focus will include an examination of the debates concerning the type of the education needed, public and private schooling efforts, the Africana Studies movement, community control issues, busing, affirmative action, re-segregation debates and new initiatives in education including vouchers, and charter schools.

#### AS&RC 191 Africa: The Continent and Its People @

Fall. 3 credits. L. Edmondson.  
An introductory interdisciplinary course focusing on Africa's geographical, ecological, and demographic characteristics; indigenous institutions and values; the triple cultural heritage of Africanity, Islam, and Western civilization; main historical developments and transitions; contemporary political, economic, social, and cultural change. Africa's ties with the United States (from trans-Atlantic slavery to the present), its impact on the emerging world order, and its contribution to world civilization will also be explored.

#### AS&RC 202 Swahili Literature @

Fall. 4 credits. Prerequisite: Swahili 134. A. Nanji.  
Students gain mastery over spoken Swahili and are introduced to the predominant Swahili literary forms.

#### AS&RC 204 History and Politics of Racialisation: A Comparative Study

Spring. 4 credits. A. Bekerie.  
The primary focus of this course will be on the historical and contemporary significance of racialisation in the United States and South Africa with regard to societal development and inter-relations. It will include an analysis

of the historical development of racialised barriers as an instrument of power and privilege. The ways with which racialisation is used as an instrument of ideology to social status, cultural hierarchy and economic positions will also be examined. Particular emphasis will be given to the development and perpetuation of scientific racism in both places. The apparent success against Jim Crow form of racism in the United States and apartheid in South Africa appears to transform racism into subtle and 'scientific' sphere. This transformation and its continued impact in perpetuating social inequality will be further analyzed.

**AS&RC 205 African Cultures and Civilizations # @**

Spring. 3 credits. D. Ohadike.

This course is concerned with the peoples of Africa and the development of African cultures and civilizations from the earliest times to the present day. It focuses on the near modern civilizations of Africa south of the Sahara, and the ancient civilizations of Egypt and the Nile Valley, together with their contributions to the development of the major world civilizations. The course also deals with the socio-political organization of African societies, their kinship systems, cross-cutting ties, rites of passage, gender relations, arts (including music, dance, folklore, architecture, sculpture, painting, and body decoration).

**AS&RC 210 Major Works of Black World Writing**

Fall. 3 credits. A. Adams.

This course surveys classic texts by African American, Caribbean, and African writers. The focus is on literary texts by authors such as Langston Hughes, Toni Morrison, James Baldwin, Maryse Conde, and Chinua Achebe, with a view toward analyzing common experiences, references, themes, and literary strategies across the Black world. The works of fiction, poetry, and drama that constitute the central material of the course are supplemented by essays and biographies from other authors who have influenced the creative vision and the movement of the peoples of Africa and the Diaspora, e.g., W.E.B. DuBois and Marcus Garvey, Nelson and Winnie Mandela.

**AS&RC 231 African American Social and Political Thought**

Spring. 3 credits. J. Turner.

This is an introductory course that will review and analyze the major theoretical and ideological formulations developed and espoused by African-Americans in the struggle for liberation. This semester we will focus specifically on the political philosophy and historical significance of Malcolm X, and the work and movement of Marcus Garvey, as the prime movers of nationalism and pan-Africanism among Black people in this century. Such themes as slave resistance, nationalism, Pan-Africanism, emigration, anti-imperialism, socialism and internal colonialism, and the political and social views of Black women will be discussed. Black political thought will be viewed in its development as responses to concrete conditions of oppression and expression.

**AS&RC 265 African American Literature in the 20th Century**

Fall. 3 credits. A. Kemp.

This course provides an overview to major works in African American literature from 1900 to the 1980s. Focusing on significant

moments in the tradition, the readings highlight literary movements, their advocates, and their detractors. Divided into four units, the literary works come from the Post-Reconstruction period, Harlem Renaissance, Socialism, Realism, and Modernists of the 1930s and 1940s, the Black Arts Movement of the 1960s and 1970s, and the Womanist critiques from the mid 1970s through the 1980s. In addition to a range of periods and styles, this course includes a range of genres, such as the autobiography, poetry, essay, short story, drama, and novel.

**AS&RC 271 Introduction to African Development (also CRP and Government 271) @**

For description, see CRP 271.

**AS&RC 280 Race, Power, and Privilege in the United States (formerly Racism in American Society)**

Fall. 3 credits. D. Barr and J. Turner.

This course will be a topical treatment of the history and theory of racism in the United States. The course will begin with an examination of basic concepts and theories of racism. From there we will examine the history of racial groups in America—African-Americans, Native Americans, Asian Americans, and the Hispanic groups. Particular attention will be paid to the political economy of racism and the sociological and the psychological aspects of race relations in America, with specific reference to the differences and intersections of race, class, gender, and ethnicity.

**AS&RC 283 History of Resistance Movements in Africa and the Diaspora @**

Fall. 3 credits. D. Ohadike.

This course deals with the history of resistance and liberation movements in Africa, Brazil, the Caribbean, and the United States. It is concerned with the dialectical relationships between European domination and Black resistance. It examines the methods, strength, and complexity of Black resistance and liberation, together with the rise of revolutionary classes in Africa and the Diaspora. It draws attention to the importance of unity and organization in resistance and then shows similarities, connections, and continuities in Black resistance. Finally, it demonstrates that African background helped to shape the nature of struggles for independence and civil liberties in the Caribbean, Brazil, and the United States.

**[AS&RC 290 The Sociology of the African-American Experience**

Fall. 3 credits. Not offered 1998-99. Next offered fall 1999. J. Turner.

This is an introductory course to the field of Africana Studies. It assumes a historical/sociological approach to the examination of the African-American experience. The course surveys the African beginnings of human kind and the classical role of Black people in world civilization and the making of early culture. The course treats issues in the humanities, social sciences, and history. This course is required for all undergraduate students majoring at the Africana Center.]

**AS&RC 304 African American Art**

Spring. 3 credits. S. Hassan.

This course investigates the different forms of African American visual artistic traditions in relation to their historical origins and socio-cultural context from the early days of slavery to the present time. The course will start with

an overview of African art and the experiences of the Middle Passage and slavery in relation to African American traditions in the decorative arts including: pottery, architecture, ironwork, quilting, basketry. This is followed by a fine art survey starting with the eighteenth and nineteenth centuries, continuing through the early twentieth-century Harlem Renaissance up to the present. Certain issues related to African American arts and creativity such as "improvisation," "Black Aesthetic," and "Pan Africanism" will also be explored. Slides, films, film strips will be used extensively to illustrate topics discussed. Visits to museums and relevant current exhibitions may be arranged.

**[AS&RC 310 Art in African Culture and Society @**

Fall. 3 credits. Not offered 1998-99. Next offered fall 1999. S. Hassan.

This course is a survey of the visual art and material cultural traditions of sub-Saharan Africa. It aims at investigating the different forms of visual artistic traditions in relation to their historical and sociocultural context. The symbolism and complexity of traditional African art will be explored through the analysis of myth, ritual, and cosmology. In-depth analysis of particular African societies will be used to examine the relationship of the arts to indigenous concepts of time, space, color, form, and sociopolitical order. New and contemporary art forms associated with major socioeconomic changes and processes of assimilation and acculturation will also be explored. These include tourist art, popular art, and elite art.]

**AS&RC 311 Government and Politics in Africa @**

Fall. 3 credits. A. Mazrui.

Power and political participation in Africa. The colonial background and its political consequences. The pre-colonial continuities in the post-colonial politics. Ethnicity and allegiance in the African polity. The monarchical tendency in African political culture. From the warrior tradition to the military coup in the post-colonial era. From the elder tradition to presidential gerontocracy. From the sage tradition to intellectual meritocracy. Class *versus* ethnicity in African politics. The one-party *versus* the multiparty state. Socio-cultural *versus* socio-economic ideologies. The gender question in African politics. The soldier and the state. The African political experience in a global context.

**AS&RC 352 Pan-Africanism and International Politics**

Spring. 3 credits. L. Edmondson.

Pan-Africanism addresses the shared experiences and aspirations of African people around the world, focused on a search for greater linkages and unifying measures. Informed by an exploration of the racial factor in international relations, this course will examine Pan-African theories, ideologies, and movements, past and present, in their political, socio-economic, and cultural manifestations, focusing mainly on the African continent, the Caribbean, and Black America.

**AS&RC 362 Global Perspectives on Gender**

Spring. 4 credits. N. Assié-Lumumba.

The course will examine how forms of gender inequality have been shaped by international forces and structured by differences in national histories. The class will be taught by a rotating set of two faculty members from

different departments. Contingent on the particular faculty member directing the course, the class will consider such issues as cross-cultural perspectives on gender; the history of work and family life in different societies; the gendered division of labor in local, national, and international economies; the impact of colonialism; the organized efforts of women to define gender relations; the role of the state in constructing an engendered economy and polity.

**AS&RC 380 African History: Earliest Times to 1800 # @**

Fall. 3 credits. A. Bekerie.

As the second largest continent with vast and varying geographical and sociocultural conditions combined with recently established fact as an original home of human species, Africa provides rich and diverse oral and written early history. The course covers some of the major historical signposts from the origins of human species to 1800. Among the topics for discussion are: Historical Perspectives and Sources, The Nile River Cultural Complex, Berber, Carthage and Maghreb of North Africa, Upper Guinea and Western Sudan of West Africa, Cities of the East African Coast, and Great Zimbabwe and other sites of Southern Africa.

**AS&RC 381 African History, 1800-Present @**

Spring. 3 credits. D. Ohadike.

This is a survey of African history in the nineteenth and twentieth centuries. It deals with African revolutions in the nineteenth century; the ending of the slave trade and the politics of the abolition; European scramble and partition of Africa; resistance to European colonial conquest; African societies in the colonial period; the politics of decolonization; Neo-colonialism; the rise and decline of military regimes; African debt crisis; and conflict and reconciliation in Africa.

**AS&RC 404 Afrocentricity: Paradigm and Critical Readings**

Fall. 4 credits. A. Bekerie.

What is Afrocentricity? It is a theoretical framework designed to study and interpret the histories and cultures of peoples of Africa and African descent by locating them at the center of their experiences. In other words, it is a method of knowing the life experiences of African peoples from the inside out. The course will examine—through the writings of Asante, Keto, Clarke, Jean, Myers, Amin, Mazrui, Gates, Appiah, Richards, Schlesinger, and Thiongo—the conception and depth of the paradigm, its relevance in the production and utilization of knowledge, particularly emancipatory knowledge, the history of the paradigm, and the debate it generates among a wide range of thinkers and scholars.

**AS&RC 410 African American Politics**

Spring. 4 credits. J. Turner.

The central thesis of African American politics has been its movements for political change and democratic access and human rights. This development since the seventeenth century is a complex political legacy. This course will conduct a close study of African American political practice and theoretical analysis of the American political system. Implications of the political systems for prospects and limitations to participation by Black people will be analyzed. Critical historical stages in the process of Black politics will be examined. The development of electoral offices in federal and statewide

politics, and the significant urban political power bases giving rise to African American mayoralty politics in critical industrial centers, as well as rural hamlets will center the course. Presidential politics—the Jesse Jackson campaigns—and new political formations including Black Republicans/conservatives will constitute the emphasis on contemporary events. The course will review the development of the literature in African American politics.

**[AS&RC 420 Public Policy and the African American Urban Community**

Spring. 4 credits. Not offered 1998–99.

Next offered spring 2000. J. Turner.

The socioeconomic conditions of the African American urban community will be the central focus of the course. Community development models will be explored in relationship to the social needs of the African American population. The changing configuration of internal organization of the African American community nationally will be examined.]

**[AS&RC 422 African Literature @**

Spring. 4 credits. Not offered 1998–99.

Next offered spring 2000. A. Adams.

With such great focus, both inside and outside Africa, on issues of Africa's "development," what place does "literature" take? Is African literature influencing or influenced by the mundane realities of daily living faced by African people? Or does African literature concern itself with philosophical ideas and ideals that transcend those realities to embrace the general human condition? Or, does it do both? The texts that we will be reading this course will be approached in terms of these issues of "African development" and "the universal human experience.]"

**AS&RC 425 African American Performance Genres and Traditions**

Spring. 4 credits. A. Kemp.

This course introduces students to the various genres in African American verbal performance practices, including poetry, rap, sermons, drama, and the performance of self in every day life. Students will perform as well as observe, read, and write critical commentary on contemporary black performance. Performance is broadly defined to include performance of the self in every day life as well as formally staged productions. Thus, students will have the opportunity to observe performance of identity in a range of black social settings. Blending analysis and practice, we begin with everyday life performances and end with staged presentations of scenes from the African American theatrical repertoire.

**[AS&RC 435 African Cinema (also Society for the Humanities 435) @**

Spring. 4 credits. Not offered 1998–99.

Next offered spring 2000. S. Hassan.

This course offers an overview of African cinema and filmmaking. It surveys historically the evolution of African cinema from its early days to the present. Through screening of selected African films, different trends within African cinema will be explored, such as "Return to the Sources" and the rediscovery of the pre-colonial past; the "Social Realist" narrative and critique of post-independence Africa; reconstructing the story of colonialism from the perspective of the colonized; and the entertainment genre. Techniques, style, and aesthetics of African cinema will also be discussed. The course offers a unique opportunity of looking at African culture and

society, and at issues of social change, gender, class, tradition, and modernization through African eyes.]

**AS&RC 451 Politics and Social Change in the Caribbean @**

Fall. 4 credits. L. Edmondson.

A study of the historical, geostrategic, political, economic, and social (including racial and cultural) forces bearing on the domestic and international experiences of Caribbean societies. Special attention will be given to conflicting definitions and perceptions of the Caribbean; contending theories of Caribbean social structure and models of development; the continuing salience of struggles for change and transformation; prospects of regional integration; and Caribbean challenges to the global system, especially with regard to the region's relations with the United States and the region's position in the Third World in the context of the North-South cleavage.

**AS&RC 455 Caribbean Literature @**

Fall. 4 credits. A. Adams.

This course will examine the prose literature of the Caribbean islands. Through the reading of several novels and short stories from the various languages and cultural strains that comprise the Caribbean societies, students will study the points of commonality and the diversity within this body of literature. The recurrence of certain historical, social, and cultural issues that have formed the multi-ethnic Caribbean peoples will be analyzed in their varying manifestations across the linguistic and other boundaries to uncover the underlying shared experience.

**AS&RC 459 Education in Africa and the Diaspora @**

Fall. 4 credits. N. Assiè-Lumumba.

This course deals with educational innovations geared to promoting equal opportunity based on gender, race and class, in Africa and the African diaspora. After an introduction on the concepts of education and innovations and the states of innovation as planned change, the course will focus on concrete historical and contemporary cases of educational innovations. The case studies in the United States include the creation and expansion of historically black institutions such as Lincoln University, Spelman College, Tuskegee Institute (now Tuskegee University), and other schools in the South, and the Westside Preparatory School in Chicago. The African cases to be studied include African languages for instruction with a focus on a Nigerian case, Ujamaa and education for self-reliance in Tanzania, and the case of Cote d'Ivoire which adopted television as a medium of instruction.

**AS&RC 468–469 Honors Thesis**

Hours to be arranged. 468, fall; 469, spring. Africana Center faculty.

For senior Africana Studies majors working on honors theses, with selected reading, research projects, etc., under the supervision of a member of the Africana Studies and Research Center faculty. Permission of the AS&RC director of undergraduate studies is required.

**AS&RC 475 Black Leaders and Movements in African-American History**

Fall. 4 credits. R. Harris.

Analyzes the personalities, ideas, and activities central to the struggle for African-American liberation from the eighteenth-century to the present. Examines theories of leadership and the structure of protest movements with the goal of understanding current leadership needs and trends among African Americans.

**AS&RC 478 Family and Society in Africa @**

Fall. 4 credits. N. Assié-Lumumba.

The family as a social institution is structured according to socio-economic, historical, political, and cultural specificities. This is the frame in which the family in Africa and the African diaspora must be analyzed. The topics to be discussed in this course include the concepts of nuclear and extended family, the place and role of different age groups and generations in the family, marriage and its related issues, parenthood, childrearing, gender roles, class differences, and "family planning." This course also deals with the impact of westernization, urbanization, and modern economy on the structure of the family in Africa as well as the legacy of African family values in the African diaspora with a focus on the African American case.

**AS&RC 479 Women and Gender Issues in Africa @**

Spring. 4 credits. N. Assié-Lumumba.

There are two contrasting views of the status and role of women in Africa. One view portrays African women as dominated and exploited by men. According to another view women have a favorable social position in Africa: indigenous ideologies consider women to be the foundation of society, they are economically active and independent and they have an identity independent of men. In this seminar we will discuss the status and role of women in Africa historically as well as in the contemporary period. Among the topics to be covered are: women in non-westernized/pre-colonial societies; the impact of colonial policies on the status of women; gender and access to schooling, participation in the economy and politics; women and the law; women and health issues; gender issues in southern Africa; womanism and feminism; the United Nations Decade of Women and the four World Conferences on Women (Mexico 1975, Copenhagen 1986, Nairobi 1985, and Beijing 1995).

**AS&RC 483 History of African Political Thought @ #**

Fall. 4 credits. D. Ohadike.

The purpose of this course is to provide students with a thorough knowledge of the history of African political thought and ideologies, from ancient times to the present.

This course is divided into two broad sections. The first section looks at the history of African political thought and institutions in ancient and near modern times and explains the functioning of African communalism. It then goes on to show how western political thought in the nineteenth and early twentieth centuries instigated the revival of such ideas as Uhuru, Negritude and African Humanism.

The second section examines the history of anti-colonial political thought. It explains why the colonial intelligentsia and radical African nationalists developed such political ideologies as African socialism, Lumumbism, and Nkrumalism. The course also looks at socio-political thought in African literature, and explores the contributions of African religious thought (like Kimbanguism and Tokoism) to the development of African political culture. Among the works of the major African political thinkers to be studied are those of Casely Hayford, Leopold Sédar Senghor, Simon Kimbangu, Amílcar Cabral, Frantz Fanon, Kwame Nkrumah, Patrice

Lumumba, Nnamdi Azikiwe, Julius Nyerere, Jomo Kenyatta, Nelson Mandela, and Steve Biko.

**AS&RC 484 Politics and Social Change in Southern Africa @**

Spring. 4 credits. L. Edmondson.

This course focuses on the legacies of apartheid and the challenges of transformation toward a post-apartheid society in South Africa. Topical emphases include: the rise and decline of apartheid; the historical continuity of Black resistance against racism; women under, against, and after apartheid; South Africa's relations with its neighbors; geo-political, economic, and racial dimensions of the American connection; politics of negotiation and transition to majority rule; prospects for stability, democracy and equality; South Africa's new role in the African continental and global arenas. Instructor's lectures will be supplemented by films and class discussions.

**AS&RC 498-499 Independent Study**

Hours to be arranged. 498-fall; 499-spring. Africana Center faculty.

For students working on special topics, with selected reading, research projects, etc., under the supervision of a member of the Africana Studies and Research Center faculty.

**AS&RC 501 Global Africa: Comparative Black Experience @**

Spring. 4 credits. A. Mazrui.

This seminar will address two diasporas in the Black experience. The *diaspora of enslavement* concerns slaves and descendants of slaves in both the Western and Eastern Diaspora. The *diaspora of colonization* concerns demographic dispersal as a result of colonialism. African-Americans are in their majority part of the Diaspora of Enslavement. Recent Algerian immigrants into France are part of the Diaspora of Colonization. Jamaicans and Trinidadians in Britain are part of a *double diaspora*—products of both enslavement and colonialism. The course will address these areas of Black comparison: Comparative Slavery—A Triple Heritage; Race and Race Mixture in Four Traditions; Comparative Emancipation from Slavery; Comparative Liberation from Colonialism; Comparative Struggle for Civil Rights; The Gender Question in Global Africa; Comparative Quest for Global Equality.

**AS&RC 502 Education and Development in Africa @**

Spring. 4 credits. N. Assié-Lumumba.

In the 1950s and 1960s, the human capital theory that emphasizes the importance of formal education for achievement of full productive potential of individuals and countries enjoyed a renewed popularity. African countries promoted educational expansion with the expectation that it would lead to socio-economic development. The initial euphoria, however was followed by skepticism and then disillusion. Education began to be perceived even as a hindrance to development. This course examines the relationship between formal education and individual and national development. In this seminar, different paradigms of development including modernization and dependency theories and Third World Forum are presented with an emphasis on the perceived and actual roles of education in individual and national development.

**[AS&RC 503 African Aesthetics @**

Fall. 4 credits. Not offered 1998-99. Next offered fall 1999. S. Hassan.

The goal of this course is to investigate in depth the principles of aesthetics and philosophy of African visual arts. The course will offer a critical survey of the different writings and the growing body of research on this relatively new area of inquiry. The objectives of the course are to review how African aesthetics has been studied to date, to provide a critical analysis of the different approaches to the subject and related issues, and to suggest future directions of research. In-depth analysis of particular African societies will be used to examine the relationship of arts and aesthetics to indigenous concept of time, space, color, form, and sociopolitical order. In addition, issues related to African aesthetics and arts such as style, gender, class, and social change will also be explored.]

**AS&RC 504 Political Change in Africa**

Fall. 4 credits. A. Mazrui.

The study of Africa can be approached either dialectically (focusing on the tension between opposing forces) or thematically (focusing on themes as chapters of experience). This course will borrow from both those approaches. In their class assignments and examinations students are free to use either approach.

The first approach will explore the dialectic between continuity and change; tradition and modernity; dependency and liberation; foreign and indigenous influences; anarchy and order; political decay and political development; democracy and authoritarianism; socialism and capitalism. The thematic approach will examine African Nationalism; race consciousness and Pan-Africanism; political parties and interest groups; executive power; ethnicity in politics; class-formation; civil-military relations; economic and cultural dependency; sub-regional and continental Pan-Africanism; crisis of the African state; and Africa in World Politics.

**AS&RC 510 Historiography and Sources: The Development of African-American History**

Spring. 4 credits. Prerequisite: upperclass or graduate standing or permission of instructor. R. Harris.

Studies the way Black historians in particular have explained the African-American past. Examines the development of writing African-American history during the twentieth century. Seeks to determine the principles for interpreting African-American history. Acquaints participants with the methodologies and sources central to understanding the African-American experience.

**[AS&RC 530 Womanist Writing in Africa and the Caribbean @**

Spring. 4 credits. Not offered 1998-99.

Next offered spring 2000. A. Adams.

Theoretical essays on the nature, relevance, and articulation of feminist thought from African and Caribbean writers will complement literary texts. Gender issues, as manifested both at home and in emigrant situations abroad will be examined in texts by such writers as Sistren, Conde, Dangarembga, Aidoo, Warner-Vieyra, Ba, Emecheta, Kincaid, W. Mandela. (Francophone works may be read in the original by individuals who so desire.)



**AS&RC 598-599 Independent Study**

598-fall; 599-spring. Variable credit. For all graduate students.

**AS&RC 601-602 Africana Studies Graduate Seminar**

601, fall; 602, spring. 4 credits. Africana Studies faculty.

This course, which will be conducted as a seminar, is designed for first-year AS&RC graduate students. It will be coordinated and supervised by one professor but team-taught by three or four faculty per semester. Each participating faculty will be responsible for a topical *segment* of the course related to her/his areas of specialization or an area of interest pertaining to theory and methodology of Africana Studies.

**AS&RC 698-699 Thesis**

698, fall; 699, spring. Limited to Africana Studies and Research Center graduate students.

**Agriculture, Food, and Society Concentration**

A. G. Power, coordinator; G. Altschuler, M. M. Devine, emeritus; M. J. Esman, J. Fessenden MacDonald, C. C. Geisler, A. Gillespie, B. Ginsberg, D. J. Greenwood, S. L. Kaplan, D. R. Lee, T. J. Lowi, T. A. Lyson, P. L. Marcus, P. McMichael, V. Nee, D. I. Owen, D. Pimentel, N. T. Uphoff, D. Usner. Office: 275 Clark Hall, 255-6042.

Agriculture, Food, and Society is an interdisciplinary concentration that is designed to introduce students to the study of agricultural and food issues from diverse perspectives within the liberal arts. The Agriculture, Food, and Society concentration seeks to make available to students a coherent program of study in which the role of agriculture in modern or prehistorical-historical and developed or developing societies can be understood in biological, social, scientific, and humanistic perspective. The concentration draws upon courses in several colleges—in particular, the Colleges of Arts and Sciences, Agriculture and Life Sciences, and Human Ecology.

The concentration is administered by a committee, the members of which are drawn from the faculty associated with the concentration. The members of this committee include faculty from each of the major colleges from which courses in the concentration are drawn. The work of the committee is supported administratively through the Biology and Society Major. The office of the Biology and Society Major (275 Clark Hall) also provides a central location for students to receive information about relevant course offerings, upcoming seminars and presentations, faculty interests, and so on.

**Basic Requirements**

The requirements for the Agriculture, Food, and Society concentration are designed to ensure a broad background in the biological, socioeconomic, and humanistic dimensions of agricultural and food issues. These requirements include foundation courses in biology; the Senior Seminar B&Soc/BioG/S&TS 469, Food, Agriculture, and Society; plus a minimum of five electives totaling 15 credits drawn from the courses offerings.

Students enrolling in the Agriculture, Food, and Society concentration should take the

following foundation courses in biology to prepare themselves for course work in agricultural science: a two-semester introductory biology sequence selected from Biological Sciences 109/110, 105/106, or 101-104. (Advanced placement in biology with a score of 4 or 5, or Biological Sciences 107/108, offered during the eight-week Cornell summer session, also satisfies the biological sciences requirement). These courses may be used to meet group 1 (physical or biological sciences) distribution sequence requirements in the College of Arts and Sciences.

It is recommended (but not required) that students in the Agriculture, Food, and Society concentration elect one or more freshman writing seminars with agriculturally related content to meet basic college requirements for graduation. The electives for the concentration, from which a minimum of five courses and 15 credits must be taken, are organized into three groups: agricultural and nutritional science, humanities, and social science/history. Students must select one agricultural and nutritional science course, one humanities course, and three social science or history courses. A maximum of six of the 15 credits may be earned in 100-level courses.

In addition, students are required to take the senior seminar, B&Soc/BioG/S&TS 469, Food, Agriculture and Society. Adjustments to these and other requirement of the concentration may be made with the approval of the student's Agriculture, Food, and Society faculty adviser.

**American Studies**

R. L. Moore, chair and director of undergraduate studies; G. Altschuler, S. Blumin, J. Brumberg, M. Kammen, I. Kramnick, T. Lowi, B. Maxwell, D. McCall, R. Polenberg, J. Porte, N. Salvatore, S. Samuels, M. E. Sanders, J. Silbey, S. Wong. Emeritus: F. Somkin, S. C. Strout

**The Major**

The major in American Studies, appropriate for a wide variety of future professions, is basically a program of coordinated study in the history, literature, and politics of the United States. The prerequisites are two courses from the following: American Studies 101, American Studies 102, English 275, English 268, Government 111, History 101, History 102. Students who contemplate becoming American Studies majors are encouraged to speak with the chair as early as possible to arrange for a major adviser.

In consultation with their advisers, American Studies majors elect, in addition to the prerequisites, 36 credits (or nine courses) of work in American history, American literature, and American government. Their work must include courses in all of the three large periods into which the nation's development can be divided (defined for the purposes of the program as colonial, nineteenth century, and twentieth century). Students must take no fewer than 4 courses before 1900. At least one of these courses must be in the period before 1800. Each student must also take one of the adviser-approved seminars at the 400 or 600 level. When the subject matter is appropriate, such a seminar may count toward the satisfaction of the period requirements. Students divide their work among history,

literature, and politics in whatever proportion serves their interests, so long as their advisers consider their programs to be well-balanced. No more than 18 credits may be in any one department.

Beyond the basic core requirements for the major, 8 credits of work in the history or literature or both of another culture are required; students are also encouraged to take at least 4 credits in American thought, society, or culture studies from the perspective of another discipline such as anthropology, economics, history of art, or sociology. (This last 4-credit supplement may be satisfied outside the college.)

Courses in American history that will satisfy the 36-credit requirement are offered by the Department of History; those in American literature are offered by the Department of English, the Department of Theatre Arts, and the Africana Studies and Research Center; those in American government are offered in the Department of Government. Occasionally a course that fits an individual student's program may be offered elsewhere. Substitution will depend on the adviser's approval. Advisers determine what courses count for the interdisciplinary seminar.

**Honors.** Candidates for honors must maintain an average of B+ in courses pertinent to the major. To be eligible for a degree with honors in American Studies, a student must in the senior year write an honors essay for American Studies 493, Honors Essay Tutorial, and take an oral examination in the declared area of special interest.

**Cornell-in-Washington Program.** American Studies majors may apply to the Cornell-in-Washington program to take courses and participate in a closely supervised externship during a fall or spring semester. For further information, see Interdisciplinary Centers, Programs, and Studies or inquire at 471 Hollister Hall, 255-4090.

**[AM ST 101 Introduction to American Studies: American Revolution to the Beginning of the 20th Century]**

Fall. 4 credits. Not offered 1998-99.

G. Altschuler and D. McCall.

In this interdisciplinary course we will analyze American values and behavior as the intersection of culture, politics, literature, and society. Among the topics explored in the course will be the democratization of American society and politics, the formation of the middle class, the Civil War, the rise of industrialization, the Victorians and sexuality, the Pragmatist revolt against Formalism. Intensive examination of Hawthorne's *Scarlet Letter*, Melville's *Moby-Dick*, James's *Portrait of a Lady*, and Mark Twain's *Huckleberry Finn* will help illuminate the relationship between literature and American values.]

**[AM ST 102 Introduction to American Studies: Progressive Era to the Present]**

Spring. 4 credits. Not offered 1998-99.

G. Altschuler and D. McCall.

In this interdisciplinary course we will analyze American values and behavior as the intersection of culture, politics, literature, and society. Among the topics explored in the course will be the death of the West and the rise of the Western, the Roaring Twenties, the New Deal and Writers on the Left, the Great War, the ideology of anti-Communism, the Civil Rights Movement, Vietnam, the Reagan

Revolution, Post-Modernism and the politics of multiculturalism. Intensive examination of the works of Ernest Hemingway, F. Scott Fitzgerald and William Faulkner will help illuminate the relationship between literature and American values.]

**AM ST 201 Popular Culture in the United States 1900-1945**

Fall. 4 credits. G. Altschuler.

American Studies 201 will deal with American popular culture in the period between 1900 and the end of World War II. As we examine best-sellers, films, sports and television, radio, ads, newspapers, magazines and music, we will try to better understand the ways in which popular culture shapes and/or reflects American values. The course will also depict popular culture as "contested terrain," the place where social classes, racial and ethnic groups, women and men, the powerful and the less powerful, seek to "control" images and themes. Topics for 201 include: the Western; Cultural Heroes and the Cult of Individualism in the 1920s; The Hays Code and the Black Sox Scandal; Mae West and the "New Women"; Advertising in an Age of Consumption; Gangsters and G-Men; Jackie Robinson and the American Dilemma.

**AM ST 202 Popular Culture in the United States 1945 to Present**

Spring. 4 credits. G. Altschuler.

American Studies 202 will treat the period from 1945 to the present. As we examine best-sellers, films, sports and television, radio, ads, newspapers, magazines and music, we will try to better understand the ways in which popular culture shapes and/or reflects American values. The course will also depict popular culture as "contested terrain," the place where social classes, racial and ethnic groups, women and men, the powerful and the less powerful, seek to "control" images and themes. Topics for 202 include: The "Honeymooners" and 1950's Television; soap operas; "Gross-out" movies; Elvis, The Beatles, and Guns 'n Roses; Gothic Romances; People Magazine and USA Today.

**AM ST 241 The History of Childhood in the United States (also HD 241)**

Fall. 3 credits. J. Brumberg.

For description, see HD 241.

**AM ST 251 Black Religious Traditions from Slavery to Freedom (also History 251 and Religious Studies 251)**

Fall. 4 credits. M. Washington.

For description, see HIST 251.

**[AM ST 258 Historical Development of Women as Professionals, 1800 to the Present (also Human Development 258, History 238, and Women Studies 238)]**

Spring. 3 credits. Not offered 1998-99. J. Brumberg.]

**AM ST 260 Introduction to American Indian Literature (also English 260)**

Fall. 4 credits. D. Moore.

For description, see ENGL 260.

**AM ST 262 Asian American Literature (also English 262 and Asian American Studies 262)**

Fall. 4 credits. S. Wong.

For description, see ENGL 262.

**[AM ST 267 American Literary Identities: Nineteenth Century (also English 267)]**

3 credits. Not offered 1998-99.]

**AM ST 275 The American Literary Tradition (also English 275)**

Fall, spring. 4 credits.

For description, see ENGL 275.

**[AM ST 291 American 1920s: Literature and Culture (also English 291)]**

4 credits. Not offered 1998-99.]

**[AM ST 302 Social Movements in American Politics (also Government 302)]**

Fall. 4 credits. Not offered 1998-99.

For description, see GOVT 302.]

**AM ST 304 American Culture in Historical Perspective, 1880-1980 (also History 304)**

Fall. 4 credits. M. Kammen.

For description, see HIST 304.

**[AM ST 311 Structure of American Political History (also History 311)] #**

Fall. 4 credits. Not offered 1998-99. Next offered 2000-01. J. Silbey.]

**[AM ST 312 Structure of American Political History (also History 312)]**

Spring. 4 credits. Not offered 1998-99.

Next offered 2000-01. J. Silbey.]

**AM ST 316 The American Presidency (also Government 316)**

Fall. 4 credits. E. Sanders.

For description, see GOVT 316.

**[AM ST 320 Understanding Work in America 1880-1990 (also History 315)]**

4 credits. Not offered 1998-99.

This course examines both the experience and the perception of work in American life in the century framed by two fundamental formations: the emergence of a system of industrial capitalism largely nationalistic in its orientation and the development of a more international economic system in more recent times. Among the topics considered will be the effects of technological change, its impact on the experience of work across numerous occupational categories, and the changing perceptions of work as reflected in contemporary cultural expression, literature, and commentary across the century.]

**AM ST 324 Varieties of American Dissent, 1880-1990 (also History 324)**

Fall. 4 credits. N. Salvatore.

The idea of dissent in American society raises a variety of images. Civil rights activists, striking workers, and student radicals of the 1960s are familiar enough symbols of dissent. But might we understand a Pentecostal believer, filled with the spirit of his or her God in critiquing contemporary society, as an example of American dissent? This course will explore the varieties of economic, political, and cultural dissent in America between 1880 and 1990, and will examine how understanding dissent in its specific historical context illuminates major aspects of American life and culture.

**[AM ST 330 The Age of Jackson, 1815-1850 (also History 330)] #**

4 credits. Not offered 1998-99. Next offered 2000-01.]

**AM ST 331 American Civil War and Reconstruction, 1850-1877 (also History 331) #**

Fall. 4 credits. J. Silbey.

For description, see HIST 331.

**[AM ST 332 The Urbanization of American Society: 1600 to 1860 (also History 332)] #**

4 credits. Not offered 1998-99.]

**[AM ST 333 The Urbanization of American Society: 1860 to 2000 (also History 333)]**

4 credits. Not offered 1998-99.]

**AM ST 336 Capitalism and Society in Developing America, 1607-1877 (also History 336) #**

Fall. 4 credits. S. Blumin.

For description, see HIST 336.

**AM ST 337 Entrepreneurialism and Organization in the Age of the Corporation: Capitalism and Society in Modern America, 1840-2000 (also History 337)**

Spring. 4 credits. S. Blumin.

For description, see HIST 337.

**AM ST 345 Intellectual/Cultural Life of Nineteenth-Century Americans (also History 345 and Religious Studies 345) #**

Fall. 4 credits. R. L. Moore.

For description, see HIST 345.

**[AM ST 346 Modernization of the American Mind (also History 346)]**

Spring. 4 credits. Not offered 1998-99.

Next offered spring 2000. R. L. Moore.

For description, see HIST 346.]

**[AM ST 359 American Families in Historical Perspective (also Human Development 359, Women Studies 357, and History 359)]**

3 credits. Not offered 1998-99.]

**[AM ST 360 Painting and Everyday Life in Nineteenth-Century America (also History of Art 360)]**

4 credits. Not offered 1998-99.]

**AM ST 361 Early American Literature (also English 361) #**

Fall. 4 credits. J. Porte.

For description, see ENGL 361.

**[AM ST 362 The American Renaissance (also English 362)]**

4 credits. Not offered 1998-99.

For description, see ENGL 362.]

**[AM ST 363 The Age of Realism and Naturalism (also English 363)]**

4 credits. Not offered 1998-99.

For description, see ENGL 363.]

**[AM ST 364 American Literature Between the Wars (also English 364)]**

4 credits. Not offered 1998-99.

For description, see ENGL 364.]

**AM ST 365 American Literature Since 1945 (also English 365)**

Fall. 4 credits. B. Maxwell.

For description, see ENGL 365.

**AM ST 366 The Nineteenth-Century American Novel (also English 366) #**

Fall. 4 credits. D. McCall.

For description, see ENGL 366.

**[AM ST 367 The Modern American Novel (also English 367)]**

4 credits. Not offered 1998-99.]

**AM ST 369 Survey of African American Literature to 1917 (also English 375)**

Fall. 4 credits. J. Goldsby.  
For description, see ENGL 375.

**AM ST 371 American Poetry to 1950 (also English 371)**

Fall. 4 credits. R. Gilbert.  
For description, see ENGL 371.

**[AM ST 374 19th-Century American Women Writers (also English 374 and Women's Studies 374) #**

4 credits. Not offered 1998–99.  
For description, see ENGL 374.]

**AM ST 376 American Political Thought from Madison to Malcolm X (also Government 366 and History 316) #**

Fall. 4 credits. I. Kramnick.  
For description, see GOVT 366.

**[AM ST 394 Topics in American Indian Literatures: Native Cultural Studies (also English 394)**

4 credits. Not offered 1998–99.  
For description, see ENGL 394.]

**AM ST 398 Independent Research**

Fall and spring. 1–4 credits. By permission only. R. L. Moore.  
This is a course of individualized research for junior or senior students. Topics, readings, and writing requirements will be designed through consultation between the student and the instructor.

**AM ST 399 Readings in American Studies**

Fall and spring. 1–4 credits. By permission only. R. L. Moore.  
This is a course of individualized readings for junior or senior students. Topics, readings, and writing requirements will be designed through consultation between the student and the instructor.

**AM ST 411 Seminar: American Political History (also History 411)**

Fall. 4 credits. W. LaFeber and J. Silbey.  
For description, see HIST 411.

**AM ST 417 History of Female Adolescence (also Human Development 417, Women Studies 438 and History 458) #**

Spring. 3 credits. J. Brumberg.  
For description, see HD 417.

**[AM ST 419 Seminar in American Social History (also History 419)**

4 credits. Not offered 1998–99.  
For description, see HIST 419.]

**AM ST 421 Undergraduate Seminar in American Cultural History (also History 421)**

Spring. 4 credits. Prerequisite: permission of instructor. M. Kammen.  
For description, see HIST 421.

**AM ST 442 Religion and Politics in American History from J. Winthrop to R. Reed (also History 442 and Religious Studies 442)**

Fall. 4 credits. R. L. Moore.  
For description, see HIST 442.

**[AM ST 462 Topics in Early Modernism (also Art History 462) #**

Fall. 4 credits. Not offered 1998–99.  
L. Meixner.  
For description, see Art H 462.]

**[AM ST 467 Studies in American Fiction: 1870–1915 (also English 467)**

4 credits. Not offered 1998–99.  
For description, see ENGL 467.]

**[AM ST 471 American Indian Women's Literature (also English 471)**

4 credits. Not offered 1998–99.  
For description, see ENGL 471.]

**AM ST 473 American Indian Autobiography (also English 473)**

Fall. 4 credits. K. Shanley.  
For description, see ENGL 473.

**AM ST 474 Contemporary African American Poetry (also English 474)**

Fall. 4 credits. K. McClane.  
For description, see ENGL 474.

**[AM ST 479 Jewish-American Writing (also English 479 and Jewish Studies 478)**

4 credits. Not offered 1998–99.]

**[AM ST 485 American Modernist Writing (also English 485)**

4 credits. Not offered 1998–99.]

**AM ST 492 Honors Seminar II, Modern American Poetry (also English 492)**

Spring. 4 credits. Permission by instructor. R. Gilbert.  
For description, see ENGL 492.

**AM ST 493–494 Honors Essay Tutorial**

493, fall; 494, spring. Up to 4 credits each semester. See R. L. Moore for appropriate advisers.

**AM ST 500 Research Seminar in American Studies (also History 500)**

Fall or spring. Offered in Cornell-in-Washington Program only. S. Blumin and others.  
For description, see HIST 500.

**[AM ST 521 Seminar in American Cultural Studies (also History 521)**

4 credits. Not offered 1998–99.]

**[AM ST 665 American Political Thought (also Government 665)**

4 credits. Not offered 1998–99.]

**Center for Applied Mathematics**

The Center for Applied Mathematics administers a broadly based interdepartmental graduate program that provides opportunities for study and research over a wide range of the mathematical sciences. This program is based on a solid foundation in analysis, algebra, and methods of applied mathematics. The remainder of the graduate student's program is designed by the student and his or her Special Committee. For detailed information on opportunities for graduate study in applied mathematics, students should contact the Director of Graduate Studies of the Center for Applied Mathematics, 657 Frank H. T. Rhodes Hall.

There is no special undergraduate degree program in applied mathematics. Undergraduate students interested in an application-oriented program in mathematics may select an appropriate program in the Department of Mathematics, the Department of Computer Science, or some department of the College of Engineering.

A listing of selected graduate courses in applied mathematics can be found in the

description of the center in "Interdisciplinary Centers, Programs, and Studies."

**Archaeology Program**

A. Ramage (history of art), program director  
S. Baugher (landscape architecture),  
R. G. Calkins (history of art), K. M. Clinton (Classics), J. E. Coleman (Classics), D. Evett (Language House Program), R. T. Farrell (English), K. L. Gleason (landscape architecture), J. S. Henderson (anthropology), K. A. R. Kennedy (ecology and systematics), P. I. Kuniholm (history of art), M. Landon (Classics), D. I. Owen (Near Eastern Studies), B. S. Strauss (history), T. P. Volman (anthropology).

Archaeology is an interdisciplinary field at Cornell, which is one of the few universities in the United States to offer a separate archaeology major. Program faculty members, affiliated with several departments, coordinate course offerings and help students identify opportunities for fieldwork, graduate study, and professional positions.

**The Major**

Prospective majors must complete Archaeology 100 or one of the basic courses as defined below before they will be admitted to the major. This initial course will not be counted toward the major requirements.

Because the major draws on the teaching and research interests of faculty from many departments to present a broad view of the archaeological process, interested students should discuss their course of study with a participating faculty member as early as possible. In some areas of specialization, intensive language training should be coordinated with other studies as early as the freshman year.

Once admitted to the major, students must take an additional 32 credits from the courses listed below, selected in consultation with a major adviser of their choosing. These courses should provide exposure to a broad range of archaeologically known cultures and the methods of revealing and interpreting them. Sixteen of the credit hours should be at the 300 level or above. At least two courses must be taken from each of categories B–E.

Courses basic to the discipline of archaeology are marked with the word "Basic" after the number of credit hours. It is recommended that majors who are planning to pursue graduate studies in archaeology should take at least two of the basic courses in each category. Further courses in languages and in geology are also recommended.

**Honors.** Honors in archaeology is awarded on the basis of the quality of an honors essay and the student's overall academic record. Prospective honors students should have a 3.5 grade point in the major and a 3.0 grade point overall. They should consult with the director of undergraduate studies before the beginning of the senior year. The honors essay is normally prepared in consultation with a faculty adviser during the senior year; students may enroll in Archaeology 481, fall; 482, spring for this purpose.

**Fieldwork.** Every student should gain some practical experience in archaeological fieldwork on a project authorized by his or her adviser. This requirement may be waived

in exceptional circumstances. The Jacob and Hedwig Hirsch bequest provides support for a limited number of students to work at excavations sponsored by Cornell and other approved institutions.

### The Concentration

Students in Cornell schools and colleges other than Arts and Sciences may elect a concentration in archaeology. To concentrate in archaeology, the student must complete five courses, all with a grade of C or better. The five courses must consist of either (1) Archaeology 100 and four other courses from categories B-D, at least three of which must be basic courses, or (2) five courses from categories B-D, at least four of which must be basic courses. Concentrators are encouraged to gain some fieldwork experience. They are eligible on the same basis as majors for Hirsch Scholarships in support of fieldwork.

### Freshman Writing Seminars

For course descriptions, see the freshman writing seminar brochure.

### A. Introductory Courses and Independent Study Courses

#### ARKEO 100 Introduction to Archaeology (also Anthropology 100) #

Fall. 3 credits. Basic. J. Henderson.  
A broad introduction to archaeology—the study of material remains to answer questions about the human past. Case studies highlight the variability of ancient societies and illustrate the varied methods and interpretive frameworks archaeologists use to reconstruct them. This course can serve as a platform for both Archaeology and Anthropology undergraduate majors.

#### ARKEO 300 Individual Study in Archaeology and Related Fields

Fall and spring. Credit to be arranged.  
Prerequisite: Archaeology 100 or permission of instructor.  
Students pursue topics of particular interest with the guidance of a faculty member.

#### ARKEO 481-482 Honors Thesis

481, fall; 482, spring. 4 (V) credits. S-U only. Prerequisite: admission to Honors Program.

The student, under faculty direction, will prepare a senior thesis.

#### ARKEO 600 Special Topics in Archaeology

Fall and spring. 4 (V) credits.  
Students pursue advanced topics of particular interest under the guidance of a faculty member(s).

#### ARKEO 681-682 Master's Thesis

681, fall; 682, spring. 4 (V) credits. S-U only. Limited to students admitted to Master's Program in Archaeology.  
Students, working individually with faculty member(s), prepare a Master's Thesis in Archaeology.

### B. Theory and Interdisciplinary Approaches

#### [ARKEO 202 Interpretive Archaeology (also Anthropology 202) #

Fall. 3 credits. Basic. Limited to 50 students. Not offered 1998-99.  
T. P. Volman.

For description, see ANTHR 202.]

#### ARKEO 203 Early People: The Archaeological and Fossil Record (also Anthropology 203)

Spring. 3 credits. Basic. T. P. Volman.

#### [ARKEO 204 Ancient Civilizations (also Anthropology 204) @ #

Fall. 3 (4) V credits. Basic. Not offered 1998-99. J. S. Henderson.]

#### ARKEO 215 Stone Age Art (also Anthropology 215) @ #

Fall. 3 credits. T. P. Volman.  
For description, see ANTHR 215.

#### [ARKEO 317 Stone Age Archaeology (also Anthropology 317)

Fall. 4 credits. Not offered 1998-99.  
T. P. Volman.  
For description, see ANTHR 317.]

#### [ARKEO 409 Approaches to Archaeology (also Archaeology 609 and Anthropology 409/609)

Spring. 4 credits. Basic. Prerequisite: permission of instructor. Not offered 1998-99. J. S. Henderson, T. P. Volman.  
For description, see ANTHR 409.]

#### [ARKEO 494 Seminar in Archaeology: The Archaeology of Human Origins (also Anthropology 494) @ #

Spring. 4 credits. Not offered 1998-99.  
T. P. Volman.  
For description, see ANTHR 494.]

#### [ARKEO 609 Approaches to Archaeology (also Archaeology 409 and Anthropology 409/609)

4 credits. Basic. Prerequisite: permission of instructor. Not offered 1998-99.  
J. S. Henderson, T. P. Volman.  
For description, see ANTHR 409.]

#### [LA 569 Archaeology in Preservation Planning and Design (also CRP 569)

Spring. 3 credits. Not offered 1998-99.  
S. Baugher.  
For description, see LA 569.]

### C. Old World Archaeology

#### ARKEO 221 Minoan-Mycenaean Art and Archaeology (also Classics 221 and History of Art 221) #

Spring. 3 credits. Basic. J. Coleman.  
For description, see CLASS 221.

#### ARKEO 233 Archaeology in Action II (also History of Art 225 and Classics 233) #

Spring. 3 credits. Prerequisite: permission of instructor. P. I. Kuniholm.  
For description, see ART H 225.

#### ARKEO 263 Introduction to Biblical History and Archaeology (also NES 263, Jewish Studies 263, and Religious Studies 264) @ #

Spring. 3 credits. Staff.  
For description, see NES 263.

#### ARKEO 275 Ancient Seafaring (also Jewish Studies 261 and Near Eastern Studies 261) @ #

Spring. 3 credits. D. I. Owen.  
For description, see NES 261.

#### ARKEO 352 The City of Athens from Theseus to Justinian (also Classics 352 and History of Art 352) #

Spring. 3 credits. M. Landon.  
For description, see CLASS 352.

#### ARKEO 380 Introduction to the Arts of China (also History of Art 380) @ #

Fall. 4 credits. A. Pan.  
For description, see ART H 380.

#### ARKEO 417 Early Medieval Archaeology and Literature (also Archaeology 617, English 417 and 617)

4 credits. Prerequisite: permission of instructor. Enrollment limited to 15 students. This course may be used as one of the three pre-1800 courses required of English majors. R. T. Farrell.  
For description, see ENGL 417.

#### [ARKEO 425 Seminar on the Bronze Age Architecture of Asia Minor (also Art History 425 and Classics 430)

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
P. I. Kuniholm.]

#### [ARKEO 432 Sardis and the Cities of Asia Minor (History of Art 424 and Classics 432) #

4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
A. Ramage.]

#### [ARKEO 434 The Rise of Classical Greece (also History of Art 434 and Classics 434) #

Spring. 4 credits. Recommended: Classics 220 or 221 or History of Art 220 or 221, or permission of instructor. Not offered 1998-99. P. I. Kuniholm.  
For description, see ART H 434.]

#### [ARKEO 435 Seminar on Roman Art and Archaeology (also Classics 435 and History of Art 427) #

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1998-99.  
A. Ramage.  
For description, see ART H 427.]

#### [ARKEO 520 Seminar in Classical Archaeology (also History of Art 520 and Classics 630)

4 credits. Not offered 1998-99.  
P. I. Kuniholm.  
For description, see ART H 520.]

#### ARKEO 617 Early Medieval Archaeology and Literature (also Archaeology 417, English 417 and 617)

Spring. 4 credits. R. T. Farrell.  
For description, see ENGL 417.

#### [ARKEO 629 The Prehistoric Aegean (also Classics 629) #

4 credits. For graduate students, and advanced undergraduates with permission of instructor. Not offered 1998-99; next offered 1999-2000. J. E. Coleman.  
For description, see CLASS 629.]

#### CLASS 220 Introduction to Art History: The Classical World (also History of Art 220) #

Fall. 4 credits. J. Coleman.  
For description, see CLASS 220.

#### CLASS 319 Art in the Daily Life of Greece and Rome (also History of Art 319)

Spring. 4 credits. A. Ramage.  
For description, see ART H 319.

#### CLASS 322 Greeks and Barbarians (also History of Art 328) #

Spring. 4 credits. Prerequisite: Classics 220 or 221, or permission of instructor.  
J. Coleman.  
For description, see CLASS 322.



**[CLASS 326 Greek Cities and Towns (also History of Art 326) #**  
4 credits. Prerequisite: Classics/History of Art 220 or permission of instructor. Not offered 1998–99. J. Coleman.  
For description, see CLASS 326.]

**[CLASS 329 Greek Sculpture (also History of Art 329) #**  
4 credits. Not offered 1998–99. J. E. Coleman.  
For description, see CLASS 329.]

**CLASS 333 Greek and Roman Mystery Cults and Early Christianity (also Religious Studies 333) #**  
Fall. 4 credits. A previous course in Classics (civilization or language) or Religious Studies 101 is recommended. K. Clinton.  
For description, see CLASS 333.

**ART H 322 Arts of the Roman Empire (also Classics 350)**  
Fall. 4 credits. A. Ramage.  
For description, see ART H 322.

**[ART H 325 Greek Vase Painting (also Classics 325) #**  
4 credits. Not offered 1998–99. A. Ramage.  
For description, see ART H 325.]

**[ART H 327 Greek and Roman Coins (also Classics 327) #**  
Fall. 4 credits. Not offered 1998–99. A. Ramage.  
For description, see ART H 327.]

**LA 292 Creating a Second Nature**  
Spring. 3 credits. Prerequisites: none. Anthropology 100, Archaeology 100, or Classics/History of Art 220 recommended. K. Gleason.  
For description, see LA 292.

#### D. New World Archaeology

**ARKEO 355 Ancient Mexico and Central America (also Anthropology 355) @ #**  
Spring. 4 credits. Basic. J. S. Henderson.  
For description, see ANTHR 355.

**[ARKEO 493 Seminar in Archaeology (also Anthropology 493) @ #**  
Fall. 4 credits. Not offered 1998–99.]

**[ANTHR 456 Mesoamerican Religion, Science, and History @ #**  
Fall. 4 credits. Not offered 1998–99.]

**[LA 360 Pre-Industrial Cities and Towns of North America (also CRP 360)**  
Fall. 3 credits. Not offered 1998–99. S. Baugher.  
For description, see LA 360.]

#### E. Methodology and Technology

**ARKEO 262 Laboratory in Landscape Archaeology (also Landscape Architecture 262)**  
Spring. 3 credits. S. Baugher.  
For description, see LA 262.

**ARKEO 285 Art, Archaeology, and Analysis (also Art 372, Engineering 185, English 185, Geology 200, MS&E 285, History of Art 200, NS&E 285, and Physics 200)**  
Spring. 3 credits. 3 lecs. Does not meet liberal studies distribution requirements. Staff.  
For description, see ENGRI 185.

**ARKEO 309 Dendrochronology of the Aegean (also History of Art 309 and Classics 309)**  
Fall and spring. 4 credits. Limited to 10 students. Prerequisite: permission of instructor. P. I. Kuniholm.  
For description, see ART H 309.

**ARKEO 370 Environmental Archaeology (also Archaeology 670 and Anthropology 370 and 670)**  
Fall. 4 credits. Prerequisite: two previous courses in archaeology or permission of instructor. T. P. Volman.  
For description, see ANTHR 370.

**ARKEO 405 Archaeological Research Design (also Archaeology 605 and Anthropology 405/605)**  
Spring. 4 credits. Basic. Prerequisite: permission of instructor. J. S. Henderson, T. P. Volman.  
For description, see ANTHR 405.

**[ARKEO 423 Ceramics (also History of Art 423 and Classics 423)**  
4 credits. Prerequisite: permission of instructor. Not offered 1998–99. Staff.]

**[ARKEO 458 Archaeological Analysis (also Archaeology 658 and Anthropology 458/658) @**  
Spring. 4 credits. Prerequisite: one course in archaeology or permission of instructor. Enrollment limited to 15 students. Not offered 1998–99. J. S. Henderson.  
For description, see ANTHR 458.]

**[ARKEO 601 Graduate Colloquium in Archaeology**  
4 credits. Open to graduate students and advanced undergraduates by permission of instructor. Not offered 1998–99. Staff.  
Faculty members of the Program in Archaeology and invited speakers will present summaries of the different aspects of archaeological analysis. Topics may include: lithics, ceramic typology, petrographic and neutron activation analysis, dendrochronology and other chronological techniques, settlement patterns, inscriptions, human and animal bones.]

**ARKEO 605 Archaeological Research Design (also Archaeology 405 and Anthropology 405/605)**  
Spring. 4 credits. Basic. Prerequisite: permission of instructor. J. S. Henderson, T. P. Volman.  
For description, see ANTHR 405.

**ARKEO 670 Environmental Archaeology (also Archaeology 370 and Anthropology 370 and 670)**  
Fall. 4 credits. Prerequisite: two previous courses in archaeology or permission of instructor. T. P. Volman.  
For description, see ANTHR 370.

**[ANTHR 371 Human Paleontology (also Biological Sciences 371)**  
Fall. 4 credits. Prerequisite: one year of introductory biology, Anthropology 101, or permission of instructor. Not offered 1998–99. K. A. R. Kennedy.  
For description, see ANTHR 371.]

**[ANTHR 474 Laboratory and Field Methods in Human Biology (also Biological Sciences 474)**  
5 credits. Prerequisite: one year of introductory biology, Anthropology 101, or permission of instructor. Not offered 1998–99. K. A. R. Kennedy.]

**LA 261 Urban Archaeology (also CRP 261)**  
Fall. 3 credits. S. Baugher.  
For description, see LA 261.

### Asian American Studies Program

The Asian American Studies Program is a university-wide academic program housed administratively within the College of Arts and Sciences. Its aim is to promote teaching, research, and educational activities related to Asian Americans and to serve as a resource to the campus and regional communities. The program's undergraduate courses, offered within the program and cross-listed with departments in various colleges, meet distribution requirements and count toward a concentration in Asian American Studies. The program does not offer a graduate course of study, but students can undertake graduate work in Asian American Studies within selected disciplines of the university.

#### Undergraduate Concentration

The program's undergraduate concentration affords students an opportunity to develop a multidisciplinary approach to the study of Asians in America. The course of study stresses developments within the United States, but also underscores the transnational and comparative contexts of Asian America and the field's connections with African American, American Indian, Latino, and Women's Studies. Students must work with a faculty adviser from among the program's affiliated faculty and must complete at least fifteen (15) units of credits as follows: (a) AAS 110 and two (2) additional courses in Asian American Studies; (b) one (1) course in Africana, American Indian, Latino Studies, or Women's Studies; and (c) one (1) course in East Asian, South Asian, or Southeast Asian Studies.\* (\*These courses must be approved by the student's faculty adviser, and they should address issues of race, gender, or the histories and cultures of Asian peoples.) Students must file an application for the concentration with the Asian American Studies Program.

#### Resource Center

The program's Asian American Studies Resource Center provides meeting space for the more than twenty-five undergraduate student organizations of the Cornell Asian Pacific Student Union and the graduate student Asian Pacific American Graduate Association. It also holds a modest print collection of books, periodicals, and newspapers; a current news clip file; a comprehensive data base of publications on Asian Americans since 1977; and a sizable collection of videotapes on the Asian American experience.

#### Research

The program encourages faculty and student research on Asian Americans by sponsoring guest lectures, conferences, film festivals, readings, and exhibits. It also funds research projects and student travel to conferences and research sites. The Asian American Studies Workshop is the program's principal research initiative, engaging Cornell's faculty and students with invited faculty from other universities in a year-long intensive study of selected themes.

**Affiliated Faculty**

Gary Y. Okihiro, director; B. Anderson (Government), T. Chaloeintarana (Southeast Asia Program), B. de Bary (Asian Studies), S. Han (Sociology), V. P. Kayastha (Kroch Library), J. V. Koschmann (History), L. C. Lee (Human Development), V. Munasinghe (Anthropology), V. Nee (Sociology), G. Okihiro, (History), R. E. Ripple (Education), N. Sakai (Asian Studies), S. Samuels (English), A. M. Smith (Government), K. W. Taylor (Asian Studies), S. Tien (Gannett Health Center), S. Wong (English), D. Yeh (Vice President Student/Academic Services)

**Courses****AAS 110 Introduction to Asian American Studies**

Fall and spring. 3 credits.

Interdisciplinary, cross-cultural introduction to Asian American Studies focusing on contemporary issues. Major themes include: identity and stereotypes, gender, family, community, education, migration and labor, and anti-Asianism. Coverage will be given to both Hawaii and the U.S. mainland, and to Asian Indians, Chinese, Filipinos, Hawaiians, Japanese, Koreans, and Southeast Asians.

**AAS 213 Asian American History**

For description, see HIST 213.

**AAS 303 Asians in the Americas: A Comparative Perspective (also Anthropology 303)**

Spring. 4 credits.

The common perception of ethnicity is that this is a "natural" and an inevitable consequence of cultural difference. "Asians" overseas, in particular, have won reputations as people who cling tenaciously to their culture and refuse to assimilate into their host societies and cultures. But, who are the "Asians"? On what basis can we label Asians an ethnic group? Although there is a significant Asian presence in the Caribbean, the category "Asian" itself does not exist in the Caribbean. What does this say about the nature of categories that label and demarcate groups of people on the basis of alleged cultural and phenotypical characteristics? This course will examine the dynamics behind group identity, namely ethnicity, by comparing and contrasting the multicultural experience of Asian populations in the Caribbean and the United States. Ethnographic case studies will focus on the East Indian and Chinese experiences in the Caribbean and the Chinese, Korean, Japanese, Filipino, and Indian experiences in the United States.

**AAS 262 Asian American Literature**

For description, see ENGL 262.

**AAS 412 Undergraduate Seminar in Asian American History (also History 412)**

Spring. 4 credits.

For description, see HIST 412. A reading and research seminar that will cover various topics in Asian American history.

**[AAS 435 Asian American Images in Film]**  
3 credits. Prerequisite: AAS 110 or permission of instructor. Not offered 1998-99.

Examination of images of Asians in American film and television productions within their historical and socio-cultural contexts. Use of film and media theory to assess the impact of those images on both Asian and non-Asian

American viewers. Students will be challenged to create, in video or on paper, images that avoid stereotypes and depict more realistically the Asian American experience.]

**[AAS 438 Immigration and Ethnic Identity]**

Spring. 4 credits. Not offered 1998-99. For description, see SOC 438.]

**[AAS 467 Psycho-Social Issues in Asian American Identity]**

Spring. 3 credits. Not offered 1998-99. For description, see HDFS 467.]

**[AAS 478 Self and Nation in Asian-American Literature (also English 478)]**

Not offered 1998-99.

A study of the ways in which Asian American writers have constructed discourses of self and nation. Topics will include nationalism, feminism, identity politics, and theories of minority discourse. In our reading of selected works of prose, poetry and drama by Chinese American, Filipino American, Japanese American and Korean American writers, we will be asking questions about the relation of these works to the moment of their production and reception, and the manner in which these textual representations engage with shifting cultural and political struggles. Writers under discussion may include: Carlos Bulosan, Theresa Hak Kyung Cha, Frank Chin, Jessica Hagedorn, David Henry Hwang, Maxine Hong Kingston, Joy Kogawa, David Mura.]

**AAS 492 Twentieth Century Women Writers of Color**

Spring. 4 credits.

This course will explore a range of writing—novels, stories, poems, essays—by American women writers of color in the twentieth century. We will look at how these writing articulate concerns with language, home, mobility, and memory, and at how the work is informed by the specificities of gender, race, region, and class. Readings may include works by Joy Harjo, Leslie Marmon Silko, Sandra Cisneros, Gloria Anzaldua, Theresa Hak Kyung Cha, Sigrid Nunez, Jamaica Kincaid, Maxine Hong Kingston, and Gwendolyn Brooks.

**AAS 495 Independent Study**

Fall or spring. 1-4 credits.

Topic and credit hours to be mutually arranged between faculty and student. Independent Study Forms must be approved by Asian American Studies Program Office.

**Biology and Society Major**

J. V. Reppy, director of undergraduate studies, colleges of Arts and Sciences and Agriculture and Life Sciences; S. K. Obendorf, advising coordinator, College of Human Ecology; D. Bates, B. Bedford, C. Bisogni, R. Boyd, T. Brenna, U. Bronfenbrenner, emeritus, R. Canfield, S. Ceci, B. Chabot, C. C. Chu, T. Dawson, P. Dear, C. Eberhard, G. W. Evans, G. W. Feigenson, J. Ford, J. Fortune, C. Geisler, K. Grazier, C. Greene, D. Gurak, J. Haas, A. Hedge, S. Hilgartner, R. Howarth, H. C. Howland, K. A. R. Kennedy, B. Knuth, A. Lemley, D. Levitsky, B. Lewenstein, B. A. Lewis, J. Fessenden MacDonald, J. Mueller, A. Netravali, N. Noy, L. Palmer, A. Parrot, D. Pimentel, T. Pinch, A. G. Power, W. Province, S. Robertson,

E. Rodriquez, M. Rossiter, P. Schwartz, J. Shanahan, M. Small, N. Sturgeon, J. M. Stycos, V. Utermohlen, E. Wethington

The Biology and Society major is ideally suited for students who wish to combine training in biology with exposure to perspectives from the social sciences and humanities on the social, political, and ethical aspects of modern biology. In addition to providing foundational training in basic biology, Biology and Society students obtain background in the social dimensions of modern biology and in the biological dimensions of contemporary social issues.

The Biology and Society major, which involves faculty from throughout the university, is offered by the Department of Science & Technology Studies. Students in the College of Arts and Sciences and the College of Human Ecology are eligible for the major. In addition, undergraduates in the College of Agriculture and Life Sciences can develop an approved sequence of courses from the Biology and Society curriculum under general studies. The major is coordinated for students in all colleges through the Biology and Society office. Students can get information, specific course requirements, and application procedures for the major from the undergraduate records office in 275 Clark Hall, 255-6047.

Because the major is multidisciplinary, students must attain a basic understanding of the several disciplines it comprises. The curriculum includes courses in ethics; mathematics; statistics; history, philosophy, and social studies of science and biology; and basic biology (e.g., genetics and development; biochemistry and molecular-cell biology; ecology; evolutionary biology) as well as integrative courses offered through Biology and Society. In addition, majors are required to take a core course and must develop a theme: an intellectually coherent grouping of courses representative of their special interest in Biology and Society. Recommended themes in the Biology and Society major include biology, behavior, and society; biology and human population; biology and public policy; environment and society; food agriculture, and society; and health and society. Students may also develop their own individually tailored themes (which in recent years have included topics such as biotechnology and society, and agriculture, environment, and society). In consultation with their faculty adviser, students select courses that meet the foundation and core course requirements so as to build a coherent theme. Sample curricula for the recommended themes and for several student developed themes are available in the Biology and Society office.

There are student advisers and faculty available (according to posted office hours or by appointment) in the Biology and Society offices, 275 Clark Hall or 278 Clark Hall, to answer questions and to provide assistance.

**Admission to the Major**

All students should have completed a year of college-level biology before submitting an application during their sophomore year. Juniors are considered on a case-by-case basis. Upper-division applicants should realize the difficulties of completing the major requirements in fewer than two years. The application includes (1) a one-page statement

explaining the student's intellectual interests in the Biology and Society major and why the major is consistent with the student's academic goals and interests; (2) the theme the student wishes to pursue in the major; (3) a tentative plan of courses fulfilling Biology and Society requirements, including courses taken and those the student plans to take; and (4) a transcript of work completed at Cornell University and elsewhere, if applicable, current as of the date of application.

Acceptance into the major requires completion of the course sequence in introductory biology. Sophomores in the process of completing this prerequisite may be admitted to the major on a *provisional* basis. It is the student's responsibility to assure that final acceptance is granted upon satisfactory completion of the introductory biology sequence. Although only introductory biological science is a prerequisite for acceptance, students will find it useful to have completed some of the other requirements (listed below) by the end of their sophomore year, preferably in the first semester. Students who are considering the major may also find it beneficial to take "S&TS 201 What is Science?" in their freshman or sophomore year. Human Ecology students should also consult the current Human Ecology Guide and meet with the college advising coordinator, Kay Obendorf, 202 Martha Van Rensselaer Hall, 255-3151.

## Major Requirements

### 1) Basic courses

- A. Biological sciences 101-104 or 105-106 or 107-108 (prerequisite for admission to Biology and Society).
- B. College calculus (one course):\* Math 106, 111, 112 or any higher level calculus.  
  
Recommended but not required:  
General chemistry (one year sequence) (prerequisite to biochemistry and other chemistry courses):  
Chemistry 103-104, 207-208, or 215-216.

### 2) Foundation Courses (should be completed by end of junior year).

- A. Ethics: One course; B&SOC 205 (also S&TS 205) or B&SOC 206 (also S&TS 206).\*\*
- B. Social sciences/humanities foundation: Two courses; one from any two of the following subject areas: History of Science; Philosophy of Science; Sociology of Science; Politics of Science; and Science Communication.\*\*
- C. Biology foundation (Breadth requirement): three courses; one each from three of the following subject areas: Ecology (BIO ES 261); Evolutionary Biology (BIO ES 278); Biochemistry, Molecular and Cell Biology (BIO BM 231 or 330 or 331 or 333); Microbiology (BIO MI 290); Genetics and Development (BIO GD 281 or 282 or Plant Breeding 225); Neurobiology and Behavior (BIO NB 221 or 222); Botany (BIO PL 241); and Anatomy and Physiology (BIO AP 311 or NS 341 but **NOT** BIO AP 212).

D. Biology foundation (Depth requirement): One biology course for which one of the above (2.C.) is a prerequisite.

E. Statistics: One course selected from MATH 171, ILR 210, BTRY 215, AG EC 310, EDUC 353, Soc 301, Psych 350, Econ 319, OR&IE 370, BTRY 601, CRP 320.

### 3) Core Course: (one course). Should be completed by end of junior year.

B&Soc 301 Biology and Society: The Social Construction of Life (also S&TS 401); or Phil 286: Science and Human Nature (also S&TS 286).

### 4) Theme (five courses that correspond to the theme selected by the student). These courses must be above the 100-level, at least 3 credit hours and taken for a letter grade. Choose these courses as follows:

A. Natural Science Issues/Biology Elective (two courses). Select from the list of B&SOC approved Natural Science Issues courses or choose course(s) with introductory biology as a prerequisite from: ALS, AN SC, BIOSCI, ENTOM, FOOD, HDFS, NS, NTRES, PL BR, PL PA, PSYCH, VTMED).

B. Humanities/social sciences electives\*\* (Two courses. Courses from the list of Senior Seminars may be used as theme electives if not used to meet another requirement).

C. Senior Seminar (One course taken senior year). Courses change yearly.

\* Students may petition to take a second statistics course (an advanced course, in sequence with the statistics course taken in the foundation) in place of the calculus requirement.

\*\* Among the courses taken to meet the social sciences and humanities requirements (2.A, 2.B, 3, and 4.C), a minimum of two social science courses and two humanities courses must be chosen. History of science and philosophy of science courses may be counted toward the humanities requirement for the major.

## Independent Study

Projects under the direction of a biology and society faculty member are encouraged as part of the program of study in the student's theme area. Applications for research projects are accepted by individual faculty members. Students may enroll for 1-4 credits in Biology and Society 375 (Independent Study) with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Applications and information on faculty research, scholarly activities, and undergraduate opportunities are available in the Biology and Society office, 275 Clark Hall. Independent study credits may not be used in completion of the major requirements.

## The Honors Program

The honors program is designed to provide independent research opportunities for academically talented undergraduate students whose major is Biology and Society (B&SOC). Students who enroll in the honors program are expected, with faculty guidance, to do

independent study and research dealing with issues in biology and society. Students who participate in the program should find the experience intellectually stimulating and rewarding whether or not they intend to pursue a research career.

Biology and Society majors are considered for entry into the honors program at the end of the spring semester before their senior year. Application forms for the honors program are available in the Biology and Society office, 275 Clark Hall. The honors program is available to Biology and Society majors from the College of Arts and Sciences. Biology and Society majors in the Colleges of Human Ecology and Agriculture and Life Sciences must be selected by an honors committee within their college. To qualify for the Biology and Society honors project, students must have an overall Cornell cumulative grade-point average not lower than 3.30, have formulated a research topic, and have found a project supervisor (with a Cornell appointment) and a Biology and Society faculty member willing to serve as their advisers. Applications will be reviewed by a committee headed by the director of undergraduate studies, who will notify students directly of the outcome. Students will be permitted to register for the honors program only by permission of the department. More information on the honors program is available in the Biology & Society office, 275 Clark Hall (255-6047).

## I. Freshman Writing Seminars

**[B&SOC 103 In the Company of Animals]**  
Spring. 3 credits. Not offered 1998-99.]

**[B&SOC 104 Ecosystems and Ego Systems]**  
Spring. Not offered 1998-99. 3 credits.]

## II. Foundation Courses

### A. Ethics (select one)

**B&SOC 205 Ethical Issues in Health and Medicine (also Science and Technology Studies 205)**

Fall. 4 credits. Limited to 150 students.

Open to sophomores, juniors, and seniors.  
Prerequisites: none. S. Hilgartner.

In today's rapidly changing world of health and medicine, complex ethical issues arise in many contexts—from the private, interpersonal interactions between doctor and patient to the broad, mass-mediated controversies that make medicine into headline news. This course examines ethical problems and policy issues that arise in contemporary medicine, health care, and biomedical research. Tools for ethical analysis are applied to a variety of cases and fundamental questions in bioethics. Perspectives from social science, history, and law also inform the course. We will explore ethical questions that arise in a number of substantive contexts, including the doctor-patient relationship, medical decision making near the end of life, human experimentation, genetics and reproductive technology, public health, and the allocation of scarce resources.

**B&SOC 206 Ethics and the Environment (also Science and Technology Studies 206)**

Spring. 4 credits. Limited to 60 students. Open to all undergraduates; permission of instructor required for freshmen. Staff. We address how ethical analysis helps shape our responses to environmental problems. Case studies will help guide our assessments. You will be challenged to develop ethical solutions or approaches on your own and in groups. Major aims include: articulating the relationships between knowledge and values; exploring the ethical implications of different conceptions of "nature"; and distinguishing between ethics and economics, ecology, ideology, politics, and prudence or wisdom. A background in basic ecology OR environmental issues OR ethics is helpful.

**B. Social Sciences/Humanities Foundation** (2 courses, 1 from any 2 areas)

**1. History of Science**

**BIOG 207 Evolution (also Science and Technology Studies 287 and History 287)**

Fall. 3 credits. (May not be taken for credit after BIOES 378, Evolutionary Biology.) Staff.

For description, see BIOG 207.

**HIST 282 Science in Western Civilization (also Science and Technology Studies 282) #**

Spring. 4 credits. P. Dear.

For description, see HIST 282.

**S&TS 233 Agriculture, History, and Society: From Squanto to Biotechnology**

Fall. 4 credits. M. Rossiter.

**S&TS 355 Computers: From Babbage to Gates**

Fall. 4 credits. M. Price.

**[S&TS 390 Science in the American Polity: 1800-1960 (also GOVT 308)]**

Fall. 4 credits. Not offered 1998-99. M. Dennis.

For description, see S&TS 390.]

**S&TS 433 Comparative History of Science**

Spring. 4 credits. M. Rossiter.

**[S&TS 444 Historical Issues of Gender and Science (also Women's Studies 444)]**

Fall. 4 credits. Not offered 1998-99. M. Rossiter.

For description, see S&TS 444.]

**2. Philosophy of Science**

**S&TS 201 What is Science? An Introduction to the Social Studies of Science and Technology**

Fall. 3 credits. J. Reppy.

**PHIL 286 Science and Human Nature (also Science and Technology Studies 286)**

Spring. 4 credits. May be used to meet the philosophy of science requirement if not used to meet the core course requirement.

For description, see PHIL 286.

**PHIL 381 Philosophy of Science: Knowledge and Objectivity (also Science and Technology Studies 381)**

Fall. 4 credits. Limited to 30 students. R. Boyd.

For description, see PHIL 381.

**3. Sociology of Science**

**B&SOC 301 Biology and Society: The Social Construction of Life (also Science and Technology Studies 401)**

Fall. 4 credits. Prerequisite: two semesters of social science or humanities and one year of introductory biology. Limited to 75 students. May be used to meet the sociology of science requirement if not used to meet the core course requirement. Staff.

See Core Courses for description.

**B&SOC 342 Sociology of Science (also Science and Technology Studies 442 and City and Regional Planning 442)**

For description, see S&TS 442.

**HSS 246 Determinants of Behavior (also PAM 201)**

Fall. 3 credits.

**R SOC 208 Technology and Society**

Fall. 3 credits.

**SOC 434 The Sociology of Reproduction (also Women's Studies 435)**

Spring. 4 credits.

For description, see SOC 434.

**S&TS 201 What Is Science? An Introduction to the Social Studies of Science and Technology**

Fall. 3 credits. J. Reppy.

**S&TS 311 The Sociology of Medicine**

Spring. 4 credits. S. Hilgartner.

**4. Politics of Science**

**[B&SOC 406 Biotechnology and Law (also Science and Technology Studies 406)]**

Fall. 4 credits. Not offered 1998-99. Staff.]

**[B&SOC 407 Law, Science, and Public Values (also Government 407 and Science and Technology Studies 407)]**

Fall. 4 credits. Not offered 1998-99. Staff.]

**S&TS 391 Science in the American Polity: 1960-Now (also Government 309)**

Spring. 4 credits. M. Dennis.

For description, see S&TS 391.

**[S&TS 427 Politics of Environmental Protection in America (also Government 427)]**

Fall. 4 credits.

For description, see S&TS 427.]

**5. Science Communication**

**COMM 260 Scientific Writing for Public Information**

Fall or spring. 3 credits. Limited to 25 nonfreshman or graduate students per section. Prerequisite: any college-level writing course.

**COMM 285 Communication in the Life Sciences**

Spring. 3 credits. B. Lewenstein.

**COMM 315 Introduction to Health Communication**

Fall. 3 credits. C. Trumbo.

**[COMM 352 Science Writing for the Mass Media (also Science and Technology Studies 352)]**

Fall. 3 credits. Not open to freshmen. Limited to 25 students. Prerequisite: one college writing course. Not offered 1998-99. B. Lewenstein.

For description, see COMM 352.]

**COMM 421 Communication and the Environment**

Spring. 3 credits. J. Shanahan.

**[COMM 466 Communication of Science and Technology]**

Fall. 3 credits. Not offered 1998-99. B. Lewenstein.]

**C. Biology foundation** (breadth requirement): Three courses: one from three of the following subject areas:

**1. Biochemistry, Molecular and Cell Biology**

**BIOBM 330 Principles of Biochemistry, Individual Instruction**

Fall or spring. 4 credits.

**BIOBM 331 Principles of Biochemistry, Lectures**

Fall. 4 credits. (2 credits if taken after Biological Sciences 231.)

**NS 262 The Cell and the External World**

Spring. 4 credits.

**2. Ecology**

**BIOES 261 Ecology and the Environment**

Fall. 4 credits.

**3. Genetics and Development**

**BIOGD 281 Genetics**

Fall, spring, or summer. 5 credits.

**BIOGD 282 Human Genetics**

Spring. 3 credits. (2 credits if taken after Biological Sciences 281.)

**[PL BR 225 Plant Genetics]**

Spring. 4 credits. Offered alternate years. Not offered 1998-99.]

**4. Evolutionary Biology**

**BIOES 278 Evolutionary Biology**

Spring. 4 credits.

**5. Microbiology**

**BIOMI 290 General Microbiology Lectures**

Fall, spring, or summer. 3 credits. Prerequisites: BIOMI 101-102 and 103-104 and CHEM 104 or 208, or equivalent. Recommended: concurrent registration in BIOMI 291.

**6. Neurobiology and Behavior**

**BIONB 221 Neurobiology and Behavior I: Introduction to Behavior**

Fall. 3 or 4 credits (4 credits with discussion and written projects). Not open to freshmen.

**BIONB 222 Neurobiology and Behavior II: Introduction to Neurobiology**

Spring. 3 or 4 credits. (4 credits with discussion and written projects). Not open to freshmen. Limited to 20 students.



## 7. Botany

**BIOPL 241 Introductory Botany**

Fall. 3 credits. Prerequisite: one year of introductory biology or permission of instructor.

## 8. Physiology and Anatomy

**BIOAP 311 Introductory Animal Physiology, Lectures (also Veterinary Medicine 346)**

Fall. 3 credits. Prerequisite: one year of college biology, chemistry, and mathematics. Recommended: previous or concurrent course in physics.

**NS 341 Human Anatomy and Physiology**

Spring. 4 credits.

**D. Biology foundation** (depth requirement): one course for which one of the above breadth requirement courses (2C) is a prerequisite.

**E. Statistics (select one)**

**ARME 210 Introductory Statistics**

Fall. 4 credits.

**BTRY 215 Introduction to Statistical Methods**

Fall. 3 credits.

**BTRY 601 Statistical Methods I**

Fall. 4 credits.

**CRP 320 Introduction to Statistical Reasoning for Urban and Regional Analysis**

Fall. 3 credits.

**ECON 319 Introduction to Statistics and Probability**

Fall or summer. 4 credits. Prerequisites: Economics 101-102 and Mathematics 111-112.

**ILRST 210 Statistics: Statistical Reasoning**

Fall and spring. 4 credits.

**PSYCH 350 Statistics and Research Design**

Fall. 4 credits.

**[SOC 301 Evaluating Statistical Evidence**

Fall. 4 credits. Not offered 1998-99.]

## III. Core Courses

**B&SOC 301 Biology and Society: The Social Construction of Life (also Science and Technology Studies 401)**

Fall. 4 credits. Prerequisite: two semesters of social science or humanities and one year of introductory biology or permission of instructor. Limited to 75 students. Staff.

Critical thinking about the diverse influences shaping the life sciences. Topics include evolution and natural selection, heredity and genetic determinism, biotechnology and reproductive interventions. We interpret episodes, past and present, in biology in light of scientists' historical location, economic and political interests, use of language, and ideas about causality and responsibility. Readings, class activities, and written assignments are designed so that students develop interpretive skills and explore their own intellectual and practical responses to controversies in biology and society.

**PHIL 286 Science and Human Nature (also Science and Technology Studies 286)**

Spring. 4 credits.

For description, see PHIL 286.

## IV. Themes

**A. Natural Science Issues/Biology Elective** (two courses). Select from the list of B&SOC approved Natural Science

Issues courses or choose course(s) with intro biology as a prerequisite from: ALS, AN SC, BIOSCI, ENTOM, FOOD, HDFS, NS, NTRES, PL BR, PL PA, PSYCH, VTMED).

**BIOAP 214 Biological Basis of Sex Differences (also Biology and Society 214 and Women's Studies 214)**

Fall. 3 credits.

For description, see BIOAP 214.

**BIOES 275 Human Biology and Evolution (also Anthropology 275 and Nutritional Sciences 275)**

Fall. 3 credits. Offered alternate years.

**BIOPL 247 Ethnobiology**

Fall. 3 credits.

**HDFS 266 Emotional Functions of the Brain**

Fall. 3 credits.

**HDFS 347 Human Growth and Development: Biological and Behavioral Interactions (also Biology and Society 347 and Nutritional Sciences 347)**

Spring. 3 credits. Prerequisites: Biological Sciences 101 or 109 or equivalent, and Human Development and Family Studies 115 or Psychology 101. Offered alternate years.

**HDFS 370 Experimental Psychopathology**

Spring. 3 credits.

**NS 222 Maternal and Child Nutrition**

Spring. 3 credits.

**NS 361 Biology of Normal and Abnormal Behavior (also Psychology 361)**

Fall. 3 credits.

For description, see NS 361.

**NTRES 201 Environmental Conservation**

Spring. 3 credits.

## Examples of biology electives

**AN SCI 300 Animal Reproduction and Development**

Spring. 3 credits.

**[HDFS 466 Neurobiology of Personality and Psychopathy**

Fall. 3 credits. Not offered 1998-99.]

**NS 331 Physiological and Biochemical Bases of Human Nutrition**

Spring. 3 credits.

**B. Humanities/Social Science elective** (two courses)

Courses listed earlier as social science/humanities foundation courses (2.B.) are particularly appropriate as social science/humanities electives. However, a single course cannot be used to meet both requirements. Additional courses that are recommended as social science or humanities electives are:

## Examples of social science electives

**ARME 464 Economics of Agricultural Development**

Spring. 3 credits.

**[ANTHRO 211 Nature and Culture @** Spring. 3 credits. Not offered 1998-99.]

**BIOES 673 Human Evolution: Concepts, History, and Theory (also Anthropology 673)**

Fall. 3 credits.

For description, see BIOES 673.

**CRP 480 Environmental Politics**

Spring. 4 credits.

**[CRP 451/551 Environmental Law**

Fall. 4 credits. Not offered 1998-99.]

**HDFS 241 History of Childhood in the United States**

Fall. 3 credits.

**[HDFS 258 The Historical Development of Women as Professionals, 1800 to the Present (also Women's Studies 238 and History 238)**

Fall. 3 credits. Limited to 120 students. Not offered 1998-99.]

**HSS 315 Human Sexuality (also PAM 380)**

Spring. 3 credits.

**[HSS 325 Health Care Services and the Consumer (also PAM 381)**

Fall. 3 credits. Offered alternate years. Not offered 1998-99.]

**HSS 330 Ecology and Epidemiology of Health (also PAM 303)**

Fall. 3 credits.

**HSS 335 Contemporary Issues in Women's Health (also PAM 350)**

Fall. 3 credits.

**HSS 634 Health Care Organization (also PAM 657)**

Fall. 3 credits.

**HSS 688 Long-Term Care and the Aged: Alternative Health and Social Service Delivery Systems (also PAM 668)**

Spring. 3 credits.

**NS 450 Public Health Nutrition**

Spring. 3 credits.

**NS 457 National and International Food Economics (also Economics 374)**

Spring. 3 credits.

**NTRES 400 International Environmental Issues**

Fall. 4 credits.

**PSYCH 326 Evolution of Human Behavior**

Fall. 4 credits.

**R SOC 201 Population Dynamics (also Sociology 205)**

Spring. 3 credits.

**R SOC 205 Rural Sociology and International Development**

Spring. 3 credits.

**R SOC 324 Environment and Society (also Science & Technology Studies 324 and Sociology 324)**

Fall and summer. 3 credits.

For description, see R SOC 324.

**[R SOC 490 Society and Survival**

Fall. 3 credits. Not offered 1998-99.]

## Examples of humanities electives

**NTRES 407 Religion, Ethics, and the Environment**  
Spring. 4 credits.

**PHIL 241 Ethics (by petition for breadth requirement)**  
Spring. 4 credits.

**[PHIL 368 Global Climate and Global Justice (also Government 468)]**  
Fall. 4 credits. Not offered 1998-99.]

**PHIL 681 Philosophy of Science (also Science & Technology Studies 681)**  
Spring. 4 credits.  
For description, see PHIL 681.

## C. Senior Seminars

**BIO G 467 Seminar in the History of Biology (also Biology & Society 447, History 415, and Science & Technology Studies 447)**  
Summer. 4 credits.  
For description, see BIO G 467.

**BIO G 469 Food, Agriculture, and Society (also Biology & Society 469 and Science & Technology Studies 469)**  
Spring. 3 credits.  
For description, see BioG 469.

**BIOES 661 Environmental Policy (also Biology & Society 461 and Agriculture and Life Sciences 661)**  
Fall, spring. 6 credits.  
For description, see BIOES 661.

**CEH 444 Housing for the Elderly (also PAM 375)**  
Spring. 3 credits.

**[HDFS 466 Neurobiology of Personality and Psychopathy]**  
Fall. 4 credits. Not offered 1998-99.]

**HDFS 610 Processes in Human Development**  
Fall. 3 credits.

**[HDFS 660 Social Development]**  
Spring. 3 credits. Permission of instructor required for undergraduates. Not offered 1998-99.]

**[HDFS 685 Seminar on "Critical Issues in Human Development: Research and Reality]**  
Spring. 3 credits. Permission of instructor required for undergraduates. Not offered 1998-99.]

**HDFS 690 The Social History of American Medicine**  
Spring. 3 credits.

**HSS 335 Contemporary Issues in Women's Health (also PAM 350)**  
Fall. 3 credits.

**HSS 625 Health Care Services: Consumer and Ethical Perspectives (also PAM 652)**  
Fall. 3-4 credits.

Permission of instructor required. If using this course as a senior seminar, B&SOC majors must take it for 4 credits by writing a major paper. Enrollment limited—preference given to HSS students.

**HSS 631 Managed Health Delivery Systems: Primary-Ambulatory Care (also PAM 656)**  
Spring. 3 credits.

**[NS 349 Geriatric Nutrition]**  
Fall. 3 credits. Not offered 1998-99.]

**NS 421 Nutrition and Exercise**  
Spring. 2-3 credits.

**[R SOC 408 Human Fertility in Developing Nations (also Biology & Society 404)]**  
Spring. 3 credits. Not offered 1998-99.  
For description, see R SOC 408.]

**R SOC 410 Population and Environment**  
Spring. 3 credits.

**[R SOC 418 Population Policy (also Biology & Society 414)]**  
Spring. 3 credits. Not offered 1998-99.  
For description, see R SOC 418.]

**[S&TS 406 Biotechnology and the Law (also Biology & Society 406)]**  
Fall. 4 credits. Not offered 1998-99. Staff.  
For description, see S&TS 406.]

**[S&TS 427 Politics of Environmental Protection in America (also Biology & Society 427 and Government 427)]**  
Fall. 4 credits. Not offered 1998-99. Staff.  
For description, see S&TS 427.]

**S&TS 490 Integrity of Scientific Practice**  
Fall. 4 credits. S. Hilgartner.

**S&TS 645 Genetic Engineering: Politics and Society in Comparative Perspective (also Government 634)**  
Spring. 4 credits. S. Hilgartner.  
For description, see S&TS 645.

## V. Other Courses

**B&SOC 375 Independent Study**  
Fall or spring. 1-4 credits. Prerequisite: must have written permission of faculty supervisor and Biology and Society major. Projects under the direction of a Biology and Society faculty member are encouraged as part of the program of study within the student's concentration area. Applications for research projects are accepted by individual faculty members. Students may enroll for 1-4 credits in Biology and Society 375 (Independent Study) with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Students may elect to do an independent study project as an alternative to, or in advance of, an honors project. Applications and information on faculty research, scholarly activities, and undergraduate opportunities are available in the Biology and Society office, 275 Clark Hall. Independent study credits may not be used in completion of the major requirements.

**B&SOC 400 Undergraduate Seminar**  
Fall or spring. Variable credit. May be repeated for credit.  
From time to time different seminars on topics of interest to undergraduates are offered. Topics and instructors are listed in the biology and society supplement issued at the beginning of each semester.

**B&SOC 499 Honors Project**  
Fall and spring. 3-5 credits each term.  
Open only to Biology and Society students in their senior year.

Students who are admitted to the honors program are required to complete two semesters of honors project research and to write an honors thesis. The project must include substantial research and the completed work should be of wider scope and greater originality than is normal for an upper-level course.

Students may take 3-5 credits per semester up to a maximum of 8 credits in B&SOC 499, Honors Project. Students should note that B&SOC 499 is to be taken in addition to those courses that meet the regular major requirements. The student and the project supervisor must reach clear agreement at the outset as to what sort of work will need to be completed during the first semester. Minimally, an honors thesis outline and bibliography should be accomplished. At the end of the first semester, a letter grade will be assigned and the advisers, in consultation with the Director of Undergraduate Studies, will evaluate whether or not the student should continue working on an honors project. Students who do continue in the honors program for the second semester will receive a letter grade at the end of their final term whether or not they complete a thesis and whether or not they are recommended for honors.

Applications and information are available in the Biology and Society office, 275 Clark Hall.

## Cognitive Studies Program

J. Halpern (computer science), B. Lust (human development, modern languages and linguistics), codirectors. C. Cardie, R. Constable, B. Donald, J. Halpern, D. Huttenlocher, L. Lee, R. Rubinfeld, B. Selman, R. Zabih (computer science); A. Hedge (design and environmental analysis); J. Dunn, J. Novak, R. Ripple, D. Schrader (education); R. Canfield, S. Ceci, B. Koslowski, B. Lust, M. Potts, S. Robertson, G. Suci, E. Wethington (human development and family studies); J. Russo (Johnson Graduate School of Management); J. Bowers, A. Cohn, M. Diesing, J. Gair, W. Harbert, S. Hertz, A. Jongman, J. Lantolf, S. McConnell-Ginet, C. Rosen, Y. Shirai, M. Suñer, H. Tao, L. Waugh, J. Whitman, D. Zec (linguistics); A. Nerode, R. Shore (mathematics); H. Howland, (neurobiology and behavior); R. Boyd, C. Ginet, H. Hodes, S. Shoemaker, J. Stanley, Z. Szabó (philosophy); J. Cutting, R. Darlington, D. Dunning, D. Field, B. Finlay, T. Gilovich, B. Halpern, A. Isen, R. Johnston, B. Khurana, C. Krumhansl, U. Neisser, R. Nijhawan, M. Owren, J. Sereno, M. Spivey (psychology); M. Macy (sociology)

Cognitive studies is comprised of a number of disciplines that are linked by a major concern with fundamental capacities of the mind, such as perception, memory, reasoning, language, and the organization of motor action. In the College of Arts and Sciences these disciplines are represented in the departments of Computer Science, Linguistics, Mathematics, Modern Languages, Philosophy, Psychology, and Sociology. Elsewhere in the university they are represented in the Department of Human Development (College of Human Ecology), the Section of Neurobiology and Behavior (Division of Biological Sciences), the Department of Education (College of Agriculture and Life Sciences), and the Johnson Graduate School of Management.

The issues addressed in cognitive studies arise at several levels. At the broadest level are problems of characterizing such basic notions as "mind," "knowledge," "information," and "meaning." At a more specific level are questions regarding the abstract operating principles of individual components of the mind, such as those underlying visual perception, language ability, and understand-

ing of concepts. These principles concern the organization and behavior of the components and also how they develop and change. At the most specific level are questions about the properties of the elementary computational structures and processes that constitute these components.

Important insights into issues of these kinds have been achieved in recent years as a result of the various cognitive studies disciplines converging in their theoretical and methodological approaches. It is this convergence, in fact, that warrants grouping the disciplines together under the single term "cognitive studies." Even greater progress can be expected in the future as a consequence of increasing cooperation among the disciplines.

### Undergraduate Concentration

An interdisciplinary undergraduate concentration in Cognitive Studies is available to Cornell University undergraduates in the College of Arts and Sciences. Students from other colleges who seek such a concentration should discuss such possibilities with the Cognitive Studies office, which will provide information and contacts concerning such concentrations.

The undergraduate concentration in Cognitive Studies is designed to enable students to engage in a structured program directly related to the scientific study of cognition and the mind. The concentration provides a framework for the design of structured, supervised programs of study in this growing interdisciplinary field. Such programs of study serve as complements to coursework in a single discipline as represented by an individual department. It is considered crucial that students gain a strong background in their major, independent of their work in the concentration. The Cognitive Studies Program faculty have designed five structured "tracks" that offer students different ways of satisfying the concentration. In addition, students are always able to construct their own programs of study subject to approval by their concentration adviser. The courses listed under each track are Program suggestions. The student should consult with his/her Cognitive Studies adviser to develop a more customized curriculum. In some cases, students may want to combine or cross tracks.

In general, it is expected that students in the concentration will take COGST 101, a lab course such as COGST 201, and three courses at the 300 or 400 level in at least two departments. Even though only five courses are required to complete the concentration, we expect that students interested in cognitive studies will often end up taking more, and we encourage them to do an independent research project (COGST 470) and a research workshop such as COGST 471.

The five tracks are as follows. The first track involves a particular approach to the study of cognition. The other four tracks are structured around specific content domains and consist of sets of suggested course clusters. Please note that many of these courses have substantial prerequisites.

1. Cognitive Studies in Context: The Workplace, the Classroom, and Everyday Life

Foundational issues in cognitive science are intimately relevant to real world settings. The Cognitive Studies in Context

track offers students the opportunity to learn and independently explore how theory and research on the mind can help us better understand how we use information in much of our daily activities, whether it be the workplace, the classroom, or any other aspect of everyday life. Students will come to better understand the cognitive ergonomics of such diverse settings as an aircraft cockpit, a quality control station on an assembly line, or an anesthesia station in a surgical suite. They will come to better understand the perceptual constraints that help tailor the nature of visual communication systems, or the linguistic constraints that help tailor text-based communication. They will come to see how the functional architecture of human memory guides the presentation and use of information in a wide array of settings. They will also learn how design constraints on computer hardware and software interact with human capacities and biases.

COGST 101/COM S 101, LING 170/PHIL 191/PSYCH 102, Introduction to Cognitive Science  
COGST 201/COM S 201/PSYCH 201, Cognitive Science in Context Laboratory

In addition, three more upper-level approved courses in Cognitive Studies areas will normally be expected.

2. Perception and Cognition

This track focuses on psychological, computational, and neurobiological approaches to the interface between perception and cognition. Students will develop a grasp of the continuum between sensory impressions and complex thought.

COGST 101/COM S 101, LING 170/PHIL 191/PSYCH 102, Introduction to Cognitive Science  
COGST 201/COM S 201/PSYCH 201, Cognitive Science in Context Laboratory  
COGST 450/LING 450/PSYCH 437, Lab Course: Language Development  
COM S 462, Robotics and Machine Vision  
BIONB 326, The Visual System  
PSYCH 305, Visual Perception  
PSYCH 309, Development of Perception and Representation  
PSYCH 316, Auditory Perception  
PSYCH 418, Psychology of Music  
PSYCH 342, Human Perception: Applications to Computer Graphics, Art and Visual Display  
PSYCH 412, Laboratory in Cognition and Perception  
PSYCH 416, Modeling Perception and Cognition  
PSYCH 419, Neural Networks Laboratory

3. Language and Cognition

This track focuses on the representation, processing, and acquisition and learning of language, as well as its role in cognition and culture. Students will acquire skills and knowledge in formal and applied linguistic theory, psycholinguistic experimentation, and computational modeling techniques.

COGST 101/COM S 101, LING 170/PHIL 191/PSYCH 102, Introduction to Cognitive Science

COGST 201/COM S 201/PSYCH 201, Cognitive Science in Context Laboratory  
COGST 450/LING 450/PSYCH 437, Lab Course: Language Development  
COM S 411, Programming Languages and Logic  
LING 203, Introduction to Syntax and Semantics  
LING/PHIL/COGST 270, Truth and Interpretation  
LING 301-302, Phonology I & II  
LING 303-304, Syntax I & II  
LING 309-310, Morphology I & II  
LING 319-320, Phonetics I & II  
LING 325, Pragmatics  
LING 350/COGST 350, Representing Language: Knowledge Taught and Untaught  
LING 403, Introduction to Applied Linguistics  
LING 409, Psycholinguistics of Second Language Reading  
LING 421-422, Semantics I & II  
PHIL 332, Philosophy of Language  
PSYCH 215/LING 215, Psychology of Language  
PSYCH 370/LING 370, Language and Cognition  
PSYCH 415, Concepts, Categories, and Word Meanings  
PSYCH 416, Modeling Perception and Cognition  
PSYCH 436/LING 436/HDFS 436/COGST 436, Language Development

4. Cognition and Information Processing

This track focuses on how the mind (or a computer) can encode, represent, and store information. Students will develop an understanding of concepts, categories, memory, and the nature of information itself.

COGST 101/COM S 101, LING 170/PHIL 191/PSYCH 102, Introduction to Cognitive Science  
COGST 201/COM S 201/PSYCH 201, Cognitive Science in Context Laboratory  
COGST 450/LING 450/PSYCH 437, Lab Course: Language Development  
COM S 211, Computers and Programming  
COM S 212, Structure and Interpretation of Computer Programs  
COM S 472, Foundations of Artificial Intelligence  
COM S 473, Practicum in Artificial Intelligence  
PHIL 262, Philosophy of Mind  
PHIL 362, Philosophy of Mind  
PSYCH 309, Development of Perception and Representation  
PSYCH 311, Introduction to Human Memory  
PSYCH 412, Laboratory in Cognition and Perception  
PSYCH 413, Information Processing: Conscious and Non-conscious  
PSYCH 414, Comparative Cognition  
PSYCH 415, Concepts, Categories, and Word Meanings  
PSYCH 416, Modeling Perception and Cognition  
PSYCH 417, The Origins of Thought and Knowledge

5. Cognitive Neuroscience

This track focuses on neurobiological and computational approaches to understanding how perception and cognition emerge in the human brain. Students will acquire

knowledge of what neural structures subserve what perceptual/cognitive processes, and how they interact.

COGST 101/COM S 101, LING 170/PHIL 191/PSYCH 102, Introduction to Cognitive Science

COGST 201/COM S 201/PSYCH 201, Cognitive Science in Context Laboratory

COM S 410, Data Structures

COM S 401, Programming Languages and Software Engineering

PSYCH 328, Biopsychology of Learning and Memory

PSYCH 396, Introduction to Sensory Systems

PSYCH 416, Modeling Perception and Cognition

PSYCH 419, Neural Networks Laboratory

PSYCH 425, Cognitive Neuroscience

PSYCH 440, The Brain and Sleep

Students in any major of the College of Arts and Sciences are eligible to apply for any of the above versions of the concentration as well as to construct their own in collaboration with a Cognitive Studies Program adviser. Independent majors and College Scholars may also apply. Students from other colleges may apply, but colleges vary in their procedures for formal recognition of this concentration (contact the Cognitive Studies office for details). To enter the concentration formally, the student should consult with a member of the Cognitive Studies Undergraduate Concentration Committee (see below), who will assist the student with selection of a concentration adviser with expertise in the student's main areas of interest.

In addition to assisting in and approving the student's selection of courses, the concentration adviser serves as a general source of information about the field of cognitive studies, relevant resources around the university, and job and graduate school opportunities. Often, the adviser can help the student develop independent research experience.

A Cognitive Studies undergraduate laboratory and computer facility is available for all students with a Cognitive Studies concentration. This facility will help link resources from different laboratories across the Cornell campus as well as providing a central location for developing and conducting experimental research in cognitive studies.

Students who complete the concentration requirements will have their concentration in Cognitive Studies officially represented on their transcript. In addition, students who have made very substantial progress towards completing the requirements for the concentration will be eligible for enrollment in the Graduate Proseminar in Cognitive Studies during their senior year (COGST 773-774).

**Concentration Application Procedures.** Initial inquiries concerning the undergraduate concentration should be made to the Cognitive Studies Program coordinator, Sue Wurster, cogst@cornell.edu, 255-6431, who will provide application materials and set up a meeting with a relevant member of the Undergraduate Concentration Committee.

To formally initiate the concentration in Cognitive Studies, a student must gain approval for a selection of courses from a concentration adviser (one of the Program faculty). The courses selected must form a

coherent cluster that makes sense to both the adviser and the student. To be admitted to the concentration, the student must submit this Plan of Study to the Cognitive Studies undergraduate faculty committee for final approval.

**Independent Research.** The concentration encourages each student to be involved in independent research that bears on research issues in cognitive studies, if possible. COGST 470 is available for this purpose. It is recommended that students report on their research activities in an annual undergraduate forum. The Undergraduate Concentration Committee is committed to helping students find an appropriate research placement when needed.

The Committee for Undergraduate Concentration in Cognitive Studies consists of: Bart Selman, computer science, 5-5643, 4144 Upson Hall, selman@cs.cornell.edu; Draga Zec, linguistics, 5-0728, 217 Morrill Hall, DZ17@cornell.edu; Jason Stanley, philosophy, 5-6829, 216 Goldwin Smith, JCS27@cornell.edu; Michael Owren, psychology, 5-3835, 224 Uris Hall, MJO9@cornell.edu. The current Director of Undergraduate Studies is Draga Zec.

## Graduate Minor

For information, consult the program office (235 Uris Hall, 255-6431, cogst@cornell.edu or the director of graduate studies, Carol Rosen 255-0722, cgr1@cornell.edu).

## Courses

### Cognitive Studies

#### COGST 101 Introduction to Cognitive Science (also COM S 101, LING 170, PHIL 191, PSYCH 102)

Fall. 3 credits. M. Spivey-Knowlton. This course surveys the study of how the mind/brain works. We will examine how intelligent information processing can arise from biological and artificial systems. The course draws primarily from five disciplines that make major contributions to cognitive science: philosophy, psychology, neuroscience, linguistics, and computer science. The first part of the course will introduce the roles played by these disciplines in cognitive science. The second part of the course will focus on how each of these disciplines contributes to the study of five topics in cognitive science: language, vision, learning and memory, action, and artificial intelligence.

#### COGST 201 Cognitive Science in Context Laboratory (also PSYCH 201 and COM S 201)

Fall or spring. 4 credits. Prerequisites: permission of the instructor or COGST 101/COM S 101/PSYCH 102. Applications will be accepted from second-semester freshmen, sophomores, and upperclass students majoring in psychology, linguistics, philosophy, or computer science. **Fall:** limited to 24 students. Discussion and demonstrations M W 10:10-11:00; lab M or W 1:25-4:25 plus additional time to be arranged. B. Halpern & staff. **Spring:** limited to 24 students. Discussion and demonstrations M W 11:15-12:05; lab M W 1:25-3:25 plus additional time to be arranged. D. Field and staff.

In this intensive course the principles and methods of cognitive science are applied directly to problems of the workplace and of everyday life. "Hands-on" experience with

experiments is provided by state-of-the-art computing, display, and simulation techniques that focus on such topics as video communication, human-computer interaction, control of complex systems, use of the World Wide Web, etc. Class meetings are devoted to reviews of the literature on a given topic, discussions of upcoming laboratory exercises, and analysis of data. In laboratory sessions, smaller groups meet to carry out the experiments using the specialized equipment available (e.g., driving simulators, virtual reality, etc.).

#### COGST 450 Lab Course: Language Development (also LING 450 and PSYCH 437) (in conjunction with HDFS/PSYCH/LING 436, Language Development)

Spring. 2 credits. B. Lust.

This laboratory course will provide undergraduates with an introduction to hands-on research experience in the Cognitive Studies Research Labs. This course is partially funded by a new National Science Foundation grant to Cornell's Cognitive Studies program. "Interdisciplinary Approaches to the Scientific Study of Language Knowledge and Acquisition." This project is intended to involve undergraduates in active research and to coordinate related subfields of several disciplines in a unified, laboratory-supported curriculum.

The course will include several structured modules dealing with topics covered in the survey course, HDFS/LING/PSYCH 436, Language Development. They will include training in how to study and analyze original child language data, including the use of selected portions of a large database of child language data from many languages in the Cornell Language Acquisition Lab (CLAL), and training necessary to the collection and analysis of new child language data. Emphasis will be placed on developing research methods to test hypotheses.

The lab course will meet once a week in group format. In addition, students will be given access to a research lab environment for independent work on assigned modules, and independent research, throughout the week, and throughout the term.

#### COGST 470 Undergraduate Research in Cognitive Studies

Fall or spring. 1-4 credits. S-U grades optional. Prerequisite: permission of major adviser; written permission of Cognitive Studies faculty member who will supervise the research and assign the grade. Hours to be arranged. Cognitive Studies faculty.

Experience in planning, conducting, and reporting independent laboratory, field, and/or library research in an interdisciplinary area relevant to cognitive studies.

#### COGST 471 Cognitive Studies Research Workshop

Fall or spring. Credits variable. Prerequisites: student must be enrolled in an independent research course (either in Cognitive Studies, e.g., COGST 470, or in a related department), or in honors thesis research in one of the departments relevant to Cognitive Studies. Staff (Interdisciplinary faculty from Cognitive Studies Program).

This course will provide a research workshop in which undergraduate students who are engaged in research in a particular area



relevant to cognitive science can meet across disciplines to learn and practice the essentials of research, using interdisciplinary approaches. In this workshop, students critique and discuss the existing literature in a field of inquiry, individual students present their research designs, methods and results from their independent research studies, debate the interpretation of their research results, and participate in the generation of new research hypotheses and designs, in a peer group of other undergraduate students involved in related research.

**[LING 270 Truth and Interpretation (also COGST 270 and PHIL 270)]**

Spring. 4 credits. Not offered 1998–99.  
J. Stanley and M. Diesing.

In this course, with the use of classic papers in the philosophy of language and linguistics, we will motivate and introduce the basic concepts behind the project of giving a rigorous theory of meaning for natural language. Our goal will be to understand how philosophers and linguists have used concepts such as reference and truth to explain linguistic content. We will also discuss how issues of learnability and language processing raise constraints for this project.]

**LING 350 Representing Language: Knowledge Taught and Untaught (also COGST 350)**

Fall. 4 credits. J. Gair.

This course will deal with some of the discoveries made in modern linguistics that reveal some fundamental properties of human language and the special human capacity for it, as well as some of the still unsettled questions about it. It will also trace some of the paradigm shifts that have occurred within linguistics and consider some of the ways in which language has been represented, both within the science of linguistics and outside of it, by contrasting what is known with what is popularly believed to be true. Projected topics will include: innateness vs. language as socio-cultural; language variability vs. universal grammar; language change and relatedness of languages; the question of correctness.

**HDFS 436 Language Development (also COGST 436, LING 436 and PSYCH 436)**

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HDFS 633, LING 700, or PSYCH 600, a supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. S-U grades optional. B. Lust.

This course surveys basic issues, methods, and research in the study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental issues of relationships between language and thought are discussed, as are the fundamental linguistic issues of Universal Grammar and the biological foundations for language acquisition. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child. An optional lab course supplement is available (see COGST 450/LING 450/PSYCH 437).

**Computer Science**

**COM S 211 Computers and Programming**  
Fall or spring. 3 credits.

**COM S 212 Structure and Interpretation of Computer Programs**  
Fall or spring. 4 credits.

**COM S 280 Discrete Structures**  
Fall or spring. 4 credits.

**COM S 381 (or 481) Introduction to Theory of Computing**  
Fall. 3 or 4 credits.

**COM S 410 Data Structures**  
Fall or spring. 4 credits.

**COM S 411 Programming Languages and Logics**  
Fall. 4 credits. Not offered every year.

**COM S 472 Foundations of Artificial Intelligence**  
Fall. 3 credits.

**COM S 473 Practicum in Artificial Intelligence**  
Fall. 2 credits.

**COM S 482 Introduction to Analysis of Algorithms**  
Spring. 4 credits.

**COM S 486 Applied Logic (also MATH 486)**  
Fall or spring. 4 credits.

**Education (College of Agriculture and Life Sciences)**

**EDUC 210 Psychology of Learning and Memory**  
Fall. 3 credits.

**EDUC 212 Psychological Foundations of Education**  
Spring. 2–3 credits.

**EDUC 311 Educational Psychology**  
Fall. 3 credits.

**Human Development (College of Human Ecology)**

**HDFS 115 Human Development**  
Fall or summer. 3 credits.

**HDFS 266 Emotional Functions of the Brain**  
Fall. 3 credits. R. A. Dépue.

**[HDFS 334 The Growth of the Mind]**  
Spring. 4 credits. Not offered 1998–99.]

**[HDFS 344 Infant Behavior and Development]**  
Fall. 3 credits. Not offered 1998–99.]

**HDFS 347 Human Growth and Development: Biological and Behavioral Interactions**  
Spring. 3 credits.

**HDFS 362 Human Bonding**  
Fall. 3 credits. C. Hazan.

**HDFS 436 Language Development (also PSYCH 436 and LING 436)**  
Spring. 4 credits.

**HDFS 438 Thinking and Reasoning**  
Fall. 3 credits.

**[HDFS 439 Cognitive Development: Infancy through Adolescence]**  
Spring. 3 credits. Not offered 1998–99.]

**Linguistics**

**LING 101 Theory and Practice of Linguistics**  
Fall, spring or summer. 4 credits.

**LING 170 Introduction to Cognitive Science (also COGST 101 and PSYCH 102)**  
Fall. 3 credits.

**LING 201 Introduction to Phonetics and Phonology**  
Spring. 4 credits.

**LING 203 Introduction to Syntax and Semantics**  
Fall. 4 credits.

**[LING 212 Language and Culture]**  
Spring. 3 credits. Not offered 1998–99.]

**LING 264 Language, Mind, and Brain**  
Fall. 4 credits.

**[LING 270 Truth and Interpretation (also COGST 270 and PHIL 270)]**  
Spring. 4 credits. Not offered 1998–99.]

**LING 301–302 Phonology I, II**  
Fall and spring. 4 credits each term.

**LING 303–304 Syntax I, II**  
Fall and spring. 4 credits each term.

**LING 309 Morphology I**  
Spring. 4 credits.

**[LING 310 Morphology II]**  
Fall. 4 credits. Not offered 1998–99.]

**LING 319 Phonetics I**  
Fall. 4 credits

**[LING 320 Phonetics II]**  
Spring. 4 credits. Not offered 1998–99.]

**LING 325 Pragmatics**  
Fall. 4 credits.

**[LING 334 Non-Linear Syntax]**  
Fall. 4 credits. Not offered 1998–99.]

**LING 350 Representing Language: Knowledge Taught and Untaught (also COGST 350)**  
Fall. 4 credits.

**[LING 400 Semiotics and Language (also COM L 410)]**  
Spring. 4 credits. Not offered 1998–99.]

**[LING 401 Approaches to Language Typology I]**  
Fall. 4 credits. Not offered 1998–99.]

**LING 402 Approaches to Language Typology II**  
Spring. 4 credits.

**LING 421 Semantics I**  
Spring (1999 only). 4 credits.

**[LING 422 Semantics II]**  
Fall. 4 credits. Not offered 1998–99.]

**LING 436 Language Development (also COGST 436, PSYCH 436 and HDFS 436)**  
Spring. 4 credits.

**LING 450 Lab Course: Language Development (also COGST 450 and PSYCH 437)**  
Spring. 2 credits.

**Mathematics**

**MATH 281 Deductive Logic (also PHIL 331)**  
Fall. 4 credits.

**MATH 481 Mathematical Logic (also PHIL 431)**  
Spring. 4 credits.

**MATH 482 Topics in Logic (also PHIL 432)**  
Spring. 4 credits.

**[MATH 483 Intensional Logics and Alternatives to Classical Logics (also PHIL 436)]**  
Fall. 4 credits. Not offered 1998-99.]

**MATH 486 Applied Logic (also COM S 486)**  
Spring. 4 credits.

#### Modern Languages

**LANG 414 Second Language Acquisition I**  
Fall. 4 credits.

**LANG 425 Corpora and Applied Linguistics**  
Fall. 4 credits.

#### Neurobiology and Behavior (Division of Biological Sciences)

**BIONB 221 Neurobiology and Behavior I: Introduction to Behavior**  
Fall. 3, 4, or 5 credits.

**BIONB 222 Neurobiology and Behavior II: Introduction to Neurobiology**  
Spring. 3 or 4 credits.

**[BIONB 326 The Visual System]**  
Spring. 4 credits. Not offered 1998-99.]

**BIONB 328 Biopsychology of Learning and Memory (also PSYCH 332)**  
Spring. 3 credits.

**BIONB 396 Introduction to Sensory Systems (also PSYCH 396)**  
Spring. 3 or 4 credits.

**BIONB 421 Effects of Aging on Sensory and Perceptual Systems (also PSYCH 431 and 631)**  
Fall. 3 or 4 credits.

**[BIONB 424 Neuroethology (also PSYCH 424)]**  
Spring. 3 credits. Not offered 1998-99.]

**BIONB 492 Sensory Function (also PSYCH 492)**  
Spring. 3 or 4 credits.

**[BIONB 496 Bioacoustic Signals in Animals and Man]**  
Spring. 3 credits. Not offered 1998-99.]

#### Philosophy

**PHIL 231 Introduction to Formal Logic**  
Fall. 4 credits.

**[PHIL 261 Knowledge and Reality]**  
Spring. 4 credits. Not offered 1998-99.]

**[PHIL 262 Philosophy of Mind]**  
Fall. 4 credits. Not offered 1998-99.]

**[PHIL 270 Truth and Interpretation (also COGST 270 and LING 270)]**  
Spring. 4 credits. Not offered 1998-99.]

**PHIL 286 Science and Human Nature (also S&TS 286)**  
Spring. 4 credits.

**[PHIL 318 Twentieth-Century Philosophy]**  
Spring. 4 credits. Not offered 1998-99.]

**PHIL 331 Deductive Logic (also MATH 281)**  
Fall. 4 credits.

**PHIL 332 Philosophy of Language**  
Spring. 4 credits.

**PHIL 361 Metaphysics and Epistemology**  
Spring. 4 credits.

**PHIL 381 Philosophy of Science: Knowledge and Objectivity (also S&TS 381)**  
Fall. 4 credits.

**[PHIL 382 Philosophy and Psychology]**  
4 credits. Not offered 1998-99.]

**[PHIL 389 Philosophy of Science: Evidence and Explanation]**  
4 credits. Not offered 1998-99.]

**[PHIL 431 Mathematical Logic (also MATH 481)]**  
4 credits. Not offered 1998-99.]

**PHIL 432 Topics in Logic (also MATH 482)**  
Spring. 4 credits.

**[PHIL 433 Philosophy of Logic]**  
4 credits. Not offered 1998-99.]

**[PHIL 436 Intensional Logic (also MATH 483)]**  
Fall. 4 credits. Not offered 1998-99.]

**[PHIL 437 Problems in the Philosophy of Language]**  
Spring. 4 credits. Not offered 1998-99.]

**[PHIL 461 Metaphysics]**  
Spring. 4 credits. Not offered 1998-99.]

#### Psychology

**PSYCH 205 Perception**  
Spring. 3 credits.

**PSYCH 209 Development**  
Spring. 4 credits.

**PSYCH 214 Issues in Cognitive Psychology**  
Fall. 3 credits.

**PSYCH 215 Psychology of Language**  
Spring. 3 or 4 credits.

**PSYCH 305 Visual Perception**  
Fall. 4 credits.

**[PSYCH 311 Introduction to Human Memory]**  
Spring. 3 credits. Not offered 1998-99.]

**PSYCH 316 Auditory Perception**  
Fall. 3 or 4 credits.

**PSYCH 326 Evolution of Human Behavior**  
Fall. 4 credits.

**PSYCH 332 Biopsychology of Learning and Memory (also BIONB 328)**  
Spring. 3 credits.

**PSYCH 342 Human Perception: Applications to Computer Graphics, Art, and Visual Display**  
Fall. 3 credits.

**PSYCH 361 Biopsychology of Normal and Abnormal Behavior (also NS 361)**  
Fall. 3 credits.

**[PSYCH 396 Introduction to Sensory Systems (also BIONB 396)]**  
Spring. 3 or 4 credits. Not offered 1998-99.]

**[PSYCH 412 Laboratory in Cognition and Perception]**  
Spring. 4 credits. Not offered 1998-99.]

**PSYCH 413 Information Processing: Conscious and Non-conscious**  
Spring. 4 credits.

**PSYCH 414 Comparative Cognition**  
Spring. 3 credits.

**[PSYCH 415 Concepts, Categories, and Word Meanings]**  
Fall. 4 credits. Not offered 1998-99.]

**[PSYCH 416 Modeling Perception and Cognition]**  
Spring. 3 credits. Not offered 1998-99.]

**[PSYCH 417 The Origins of Thought and Knowledge]**  
Fall. 4 credits. Not offered 1998-99.]

**PSYCH 418 Psychology of Music**  
Spring. 3 or 4 credits.

**[PSYCH 425 Cognitive Neuroscience]**  
Fall. 4 credits. Not offered 1998-99.]

**PSYCH 436 Language Development (also COGST 436, HDFS 436 and LING 436)**  
Spring. 4 credits.

**PSYCH 492 Sensory Function (also BIONB 492)**  
Spring. 4 credits.

#### Sociology

**SOC 480 Simulating Social Dilemmas (also SOC 580)**  
Fall. 4 credits.

#### Graduate Courses and Seminars

The following courses and seminars are generally for graduate students only. However, some may be appropriate for advanced undergraduates. The director of the concentration must approve an undergraduate's use of any of these for satisfying the concentration requirements.

**COGST 773-774 Proseminar in Cognitive Studies I and II (also Com S 773/774; Ling 773/774; Phil 773/774; Psych 773/774)**

Fall: R grade; spring: S-U only. 4 credits.  
T 1:25-2:40. Staff.

The Cognitive Studies Proseminar consists of two semesters of meetings with the graduate faculty in the field of Cognitive Studies. The proseminar will provide a general introduction to the field of Cognitive Studies including an introduction to each of the major disciplines that comprise the minor: i.e., computer science, linguistics, philosophy, and psychology. In each of these disciplines, faculty from the field will introduce theoretical and methodological issues that underlie the field and its relation to Cognitive Studies; in addition, they will introduce various labs in which active research is being conducted in their field at Cornell, and current issues of interdisciplinary interest.

The proseminar will include suggestions from faculty in each field for further advanced interdisciplinary research that can be pursued at Cornell during a Cognitive Studies minor. It will conclude (end of second term) with individual student presentations in which students initiate a critique of some interdisciplinary research, after consultation with a faculty member of their choice.

Although suitable to entering graduate students, the proseminar is also open to graduate students beyond their first year. Advanced undergraduates with a Cognitive Studies concentration may also be admitted. This is a year-long lecture and discussion course. The year-long commitment is mandatory. An "R" grade will be assigned in the fall semester, and an S-U grade will only be assigned in the spring semester.

**COM S 674 Natural Language Processing**  
Spring. 4 credits. Prerequisite: COM S 472 recommended.

**COM S 676 Reasoning About Knowledge**  
Fall. 4 credits. Prerequisites: mathematical maturity and an acquaintance with propositional logic. Not offered every year; next offered fall 1998. J. Y. Halpern.

**[COM S 677 Reasoning About Uncertainty]**  
Fall. 4 credits. Prerequisites: mathematical maturity and an acquaintance with propositional logic. Not offered every year; next offered fall 1999. J. Y. Halpern.]

**COM S 775 Seminar in Natural Language Understanding**  
Fall and spring. 2 credits.

**EDUC 611 Educational Psychology**  
Fall. 3 credits. Undergraduates admitted with permission from instructor. R. Ripple.

**EDUC 614 Epistemological Development and Reflective Thought**  
Fall. 3 credits.

**EDUC 714 Moral Development and Education**  
Spring. 3 credits.

**HDFS 600/700 Graduate Seminars**

**LING 637 Experimental Research for Language Sciences**  
Fall. 4 credits. A. Jongman, J. Lantolf.

**LING 700 Graduate Seminars**

**MATH 581 Logic**

**MATH 655 Mathematical Foundations of Computer Modeling and Simulation**

**MATH 684 Recursion Theory**

**MATH 688 Automated Theorem Proving**

**LANG 700 Seminar (Grammaticization and Second Language Acquisition)**  
Spring. 4 credits.

**PHIL 700 Graduate Seminars**

**PSYCH 601 Computational Models of Language**  
Spring. 4 credits. Prerequisite: consent of instructor. M. Spivey.

**PSYCH 676 Topics in Emotion**  
Spring. 4 credits. M. Owren and C. Krumhansl.

## College Scholar Program

L. Abel, director, 55 Goldwin Smith Hall, 255-3386.

The College Scholar program is described in the introductory section of Arts and Sciences.

**COLLS 397 Independent Study**  
Fall or spring. 1-4 credits. Prerequisite: permission of program office.

## COLLS 499 Honors Research

Fall or spring. 1-8 credits; a maximum of 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit a brief proposal approved by the honors committee.

## East Asia Program

140 Uris Hall

J. V. Koschman, director; E. M. Gunn, associate director, T. Bestor, D. Boucher, K. W. Brazell, M. Brinton, R. Bullock, P. Button, P. Chi, T. Christensen, S. G. Cochran, B. de Bary, C. d'Orban, G. Fields, P. J. Katzenstein, F. Kotas, J. M. Law, L. C. Lee, T. P. Lyons, T. L. Mei, V. Nee, C. A. Peterson, J. R. Piggott, V. Pucik, N. Sakai, P. S. Sangren, Y. Shirai, V. B. Shue, R. J. Sukle, H. Tao, K. W. Taylor, H. Wan, J. B. Whitman. Emeritus: K. Biggersstaff, E. H. Jorden, J. McCoy, R. J. Smith, M. W. Young

East Asian studies at Cornell are led by thirty-five faculty members from five colleges, who participate in a program of research and teaching on the civilizations and cultures of East Asia. Courses are offered through various departments in most of the humanities and social science disciplines, as well as in the fields of business, city and regional planning, international and comparative labor relations and rural sociology. Language courses in Mandarin, Cantonese, Korean, and Japanese are offered, in addition to the Full-year Asian Language Concentration (FALCON) in Japanese and Mandarin. Undergraduates major in the Department of Asian Studies and concentrate on the language and culture of one East Asian country, while graduate students may work toward an M.A. in East Asian studies, a dual M.B.A./M.A. degree, or an M.A./Ph.D. degree in a discipline such as agricultural economics, anthropology, city and regional planning, government, history, history of art, linguistics, literature, rural sociology, or sociology. A variety of fellowships, travel grants, awards, and assistantships are available for graduate students concentrating on East Asia.

The formal program of study is enriched by a variety of extracurricular activities, including a Japanese and Chinese language house, film series, workshops, art exhibits, and numerous lectures, symposia and performances related to East Asia. The Wason Collection in Olin Library is a comprehensive collection of books on East Asia in Western languages, Japanese, Chinese, and Korean. The Mary Rockwell Galleries of the Herbert F. Johnson Museum of Art have an excellent collection of East Asian art.

## Freshman Writing Seminars

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, see the John S. Knight Writing Program section, and consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in late October for the spring term.

## Human Biology Program

J. Haas (nutritional sciences), director, 211 Savage Hall, 255-8001; B. Finlay (psychology), J. Fortune (physiology/women's studies), E. Frongillo (nutritional sciences), R. Johnston (psychology), K.A.R. Kennedy (ecology and systematics/anthropology), D. Levitsky (nutritional sciences), P. W. Nathanielsz (physiology), D. L. Pelletier (nutritional sciences), W. Provine (ecology and systematics/history), R. Robertshaw (physiology), S. Robertson (human development), R. Savin-Williams (human development), M. Small (anthropology)

Human biology integrates the methods and theories of many disciplines, such as biological anthropology, nutrition, neurobiology, physiology, psychology, demography, ecology, genetics, and paleontology, into a comprehensive study of biological diversity in *Homo sapiens*. A central focus of this interdisciplinary approach to the study of the human organism is an understanding of evolutionary processes that explain our biological variation through space and time. The program of study seeks to educate future biological scientists to address the concerns of a society that is becoming more demanding of the scientific community to place its specialized biological knowledge in a broad context. The human biology curriculum is of particular relevance to undergraduate students in premedical and predentistry programs, biological anthropology, nutrition, human development, ecology and systematics, psychology, physiology, genetics, and the health-related sciences. It serves to bring together students with a common interest in humankind as defined from these diverse fields and to provide a forum for student-faculty interaction on various topics relating to human evolution and biological diversity. Human biology is not a major but a curriculum of study that provides majors in various departments with a program for selecting elective courses that deal with the biology of the human species. Students in their junior year may develop a program of study in human biology while majoring in a number of different departmental fields.

## Basic Requirements

The requirements for a program of study in human biology are designed to ensure sufficient background in physical sciences and mathematics to enable the student to pursue a wide range of interests in the fields of modern biological sciences, anthropology, and fields related to the evolution and physical diversity of the human species. Adjustments may be made in these requirements, depending upon the student's academic background and affiliation with colleges and schools within the university.

The basic requirements are one year of introductory biology (Biological Sciences 101-103 plus 102-104 or 105-106 or Biological Sciences 107-108 offered during the eight-week Cornell Summer Session); one year of general chemistry (Chemistry 103-104 or 207-208 or 215-216); one year of college mathematics (Mathematics 111-112 or 105-106 or 111-105); one course in genetics (Biological Sciences 281 or 282); one course in biochemistry (Biological Sciences 231, 330 or 331). It is recommended that students planning graduate study in biological

anthropology, psychology, and related fields in the medical and nutritional sciences take a course in statistics. Students should consult their faculty adviser in human biology for help in selecting appropriate courses.

Elective courses should be taken that will enable the student to acquire breadth in the subject matter of human biology outside of their departmental major. Therefore only 6 of the 15 human biology elective credits may also fulfill requirements for the major. Courses should be selected that also provide sufficient exposure to the integration of basic anatomical and physiological sciences with the behavior of individuals and groups within the context of evolutionary theory and ecology. The courses listed below are representative of the offerings in human biology and are included to assist the student in organizing a curriculum of study. They are organized into three groups that reflect the three levels of integration noted above: (1) human anatomy and physiology, (2) human behavior, and (3) human evolution and ecology. Students should choose at least one course from each of these areas of integration. It is anticipated that the student will include in a program of study at least one of the laboratory courses offered. It is expected that a student will take a minimum of 15 credits from among these courses.

There is no foreign language requirement for human biology beyond what is dictated by specific departments and colleges. The requirements for the human biology curriculum are set alongside requirements of the undergraduate majors as these are defined by different departments. Students with independent majors may design their own programs of study under the guidelines provided by their college. Although a student may indicate an interest in human biology in the freshman year and be able to obtain early guidance from a faculty adviser representing the curriculum of study, it is more usual for students to establish their course programs in the first semester of the junior year. The student may request one of the faculty advisers in his or her department who is listed as faculty in human biology to be their principal adviser, or he or she may have an adviser in the department of the major and seek the advice of a human biology faculty adviser in matters pertaining to satisfaction of the requirements. In certain cases a faculty adviser may represent both the major and the curriculum of study in human biology.

## Courses

### Human Anatomy and Physiology

**BIO AP 214 Biological Basis of Sex Differences (also Biology and Society 214 and Women's Studies 214)**  
Fall. 3 credits.

**BIO ES 274 The Vertebrates: Structure, Function, and Evolution**  
Spring. 4 credits.

**BIO AP 311 Introductory Animal Physiology, Lectures (also Veterinary Physiology 346)**  
Fall. 4 credits.

**BIO AP 319 Animal Physiology Experimentation**  
Fall. 4 credits.

**BIO AP 458 Mammalian Physiology**  
Spring. 3 credits.

**BIO ES 474 Laboratory and Field Methods in Human Biology (also Anthropology 474)**  
Spring. 5 credits.

**NS 115 Nutrition and Health: Concepts and Controversies**  
Fall. 3 credits.

**NS 222 Maternal and Child Nutrition**  
Spring. 3 credits.

**NS 315 Obesity and the Regulation of Body Weight**  
Fall. 3 credits.

**NS 331 Physiological and Biochemical Bases of Human Nutrition**  
Spring. 4 credits.

**NS 341 Human Anatomy and Physiology Lab.**  
Spring. 4 credits.

**NS 361 Biology of Normal and Abnormal Behavior (also Psychology 361)**  
Fall. 3 credits.

**NS 441 Nutrition and Disease**  
Fall. 4 credits.

**PSYCH 322 Hormones and Behavior (also Biological Sciences 322)**  
Spring. 3 or 4 credits.

**PSYCH 425 Cognitive Neuroscience**  
Fall. 3 or 4 credits.

**VET MI 431 Medical Parasitology**  
Fall. 2 credits.

### Human Behavior

**ANTHR 390 Primate Behavior and Ecology**  
Spring. 4 credits.

**ANTHR 490 Primates and Evolution**  
Spring. 4 credits.

**B&SOC 301 Biology and Society I: The Social Construction of Life (also Science and Technology Studies 401)**  
Fall. 4 credits.

**BIO NB 421 Effects of Aging on Sensory and Perceptual Systems (also Psychology 431 and 631)**  
Fall. 3 or 4 credits.

**BIO NB 427 Animal Social Behavior**  
Fall. 4 credits.

**HDFS 344 Infant Behavior and Development**  
Fall. 3 credits.

**HSS 315 Human Sexuality**  
Spring. 3 credits.

**NS 245 Social Science Perspectives of Food and Nutrition**  
Fall. 3 credits.

**NS 347 Human Growth and Development: Biological and Behavioral Interactions (also Human Development 347 and Biology and Society 347)**  
Spring. 3 credits.

**PSYCH 326 Evolution of Human Behavior**  
Fall. 4 credits.

**PSYCH 425 Cognitive Neuroscience**  
Fall. 3 or 4 credits.

**R SOC 408 Human Fertility in Developing Nations**  
Spring. 3 credits.

**R SOC 438 Social Demography**  
Fall. 3 credits.

### Human Evolution and Ecology

**ANTHR 101 Introduction to Anthropology: Biological Perspectives on the Evolution of Humankind**  
Fall. 3 credits.

**ANTHR 203 Early People: The Archaeological and Fossil Record (also Archaeology 203)**  
Spring. 3 credits.

**ANTHR 390 Primate Behavior and Ecology**  
Spring. 4 credits.

**ANTHR 391 The Evolution of the Human Life Cycle**  
Spring. 3 credits.

**ANTHR 490 Primates and Evolution**  
Spring. 4 credits.

**BIO G 207 Evolution (also History 287, and Science and Technology Studies 287)**  
Fall or summer. 3 credits.

**BIO ES 261 Ecology and the Environment**  
Fall or summer. 4 credits.

**BIO ES 272 Functional Ecology of Vertebrates**  
Spring. 4 credits.

**BIO ES 275 Human Biology and Evolution (also Anthropology 275 and Nutritional Sciences 275)**  
Fall. 3 credits.

**BIO ES 278 Evolutionary Biology**  
Fall or spring. 3 or 4 credits.

**BIO ES 371 Human Paleontology (also Anthropology 371)**  
Fall. 4 credits.

**BIO ES 461 Population and Evolutionary Ecology**  
Spring. 4 credits.

**BIO ES 464 Macroevolution**  
Spring. 4 credits.

**BIO ES 470 Ecological Genetics (also Entomology 470)**  
Spring. 4 credits.

**BIO ES 471 Mammalogy**  
Fall. 4 credits.

**BIO GD 481 Population Genetics**  
Fall. 4 credits.

**BIO GD 482 Human Genetics and Society**  
Fall. 3 credits.

**BIO GD 484 Molecular Evolution**  
Spring. 3 credits.

**BIO ES 673 Human Evolution: Concepts, History and Theory (also Anthropology 673)**  
Fall. 3 credits.

**B&SOC 447 History of Biology-Evolution (also History 447)**  
Fall. 4 credits.

**HSS 330 Ecology and Epidemiology of Health**  
Spring. 3 credits.



**NS 306 Nutritional Problems of Developing Nations**

Fall. 3 credits.

**PSYCH 326 Evolution of Human Behavior**

Fall. 4 credits.

**R SOC 201 Population Dynamics**

Spring. 3 credits.

**VET MI 431 Medical Parasitology**

Fall. 2 credits.

**VET CS 664 Introduction to Epidemiology**

Fall. 3 credits.

**Independent Major Program**

L. Abel, director, 55 Goldwin Smith Hall, 255-3386.

The Independent Major Program is described in the introductory section of Arts and Sciences.

**IM 351 Independent Study**

Fall or spring. 1-4 credits. Prerequisite: permission of the program office.

**IM 499 Honors Research**

Fall or spring. 1-8 credits; a maximum of 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit a brief proposal approved by the honors committee.

**Intensive English Program**

305 Morrill Hall

J. M. Mancusi, director; E. J. Beukenkamp, R. L. Feldman, K. Golkowska, M. Johns, M. T. Lovell, S. Yates

This noncredit, nondegree program provides full-time intensive English language instruction as well as academic, social, and cultural orientation to the United States and its institutions. The aim of the program is for participants to acquire proficiency in the language in order to pursue goals in English for academic, business, professional, or personal purposes.

Programs are offered both fall and spring semesters and in the six-week summer session (from late June to early August). Participants receive a minimum of 20 hours of classroom instruction weekly in speaking, listening, reading, writing, and grammar, which are taught at all levels from low intermediate through very-high advanced. Applicants must be at least 17 years of age, hold the equivalent of a high school diploma, and have had some previous study of English.

Students who have gained full admission to or who are already registered in degree-granting programs at Cornell should consult the section "Modern Languages" for information regarding courses in English for Academic Purposes (series ENGLF).

The Intensive English Program is administered by the Department of Modern Languages, Cornell University, Morrill Hall, Ithaca, New York 14853-4701, U.S.A. Information and application materials are available directly from the program by writing to the above address, calling 607/255-4863, or faxing 607/255-7491. Internet e-mail is [CUIEP@cornell.edu](mailto:CUIEP@cornell.edu). Web page is <http://dml.cornell.edu/languages/IEP/cuipe.html>.

**International Relations Concentration**

Matthew Evangelista, director  
([mae10@cornell.edu](mailto:mae10@cornell.edu))

Integral to international relations is a focus on global issues and processes and an understanding of their impact on particular countries or geographic regions. Cornell's several undergraduate colleges and many departments offer courses that provide a strong grounding in the field as well as an opportunity to study more than 60 languages.

The concentration in international relations provides a curricular structure for undergraduate students with an interest in international law, economics, agriculture, trade, banking, organizations, and government service, and in cross-cultural affairs or education. Students can major in just about anything and in addition "concentrate" in international relations. They can major in a field that the concentration in international relations closely complements (for example, history, government, economics, or anthropology) or they can major in some very different subject, including the sciences, and use the concentration to develop a separate expertise. Some students design an independent major in some aspect of international relations or comparative social or cultural studies.

**Course Requirements:**

These requirements are designed to expose students to a broad range of perspectives in international relations while allowing them to tailor their course selections to specific interests. Courses throughout the university are grouped into four subject areas: 1) International Economics and Development; 2) World Politics and Foreign Policy; 3) Transnational Processes and Policies; and 4) Cultural Studies. Within these four subject areas, courses are also identified as "core" or "elective." Students must complete seven courses selected from the four groups according to one of two strategies. Option A emphasizes the politics and economics of international relations. Option B puts greater stress on culture. In choosing either option, students should ensure that they acquire familiarity with more than one geographic region or country.

**Option A:**

- One core course from Groups 1, 2, and 4
- One elective from Groups 1, 2, 3, and 4

**Option B:**

- One core course from Groups 1, 2, and 4
- One elective from either Group 1 or Group 2
- One elective from Group 3 and Group 4, and one additional elective from Group 3 or Group 4

Students should take note that some courses have prerequisites. **The list of courses here (for fall 1998 only) is representative but not complete.** Many other courses throughout the university can qualify for the IR Concentration. For further information, contact the administrative coordinator or the director of the IRC (address below).

**Course List Fall 1998**

(For Course List Spring 1999, contact IRC program in fall of 1998)

**Group 1: International Economics and Development**

|            |                    |   |
|------------|--------------------|---|
| Core:      | Arme 430           | International Trade Policy (prerequisites: Econ 101-102)        |
|            | Econ 361           | International Trade Theory (prerequisites: Econ 101-102-313)    |
| Electives: | Econ 425           | Economic History of Latin America                               |
|            | Econ 458           | Topics in 20th-Century Economic History                         |
|            | Econ 469           | The Economy of China  |
|            | Econ 471           | Economy of the Former USSR and Central Europe                   |
|            | Econ 472           | Comparative Economic Systems: East and West                     |
|            | Econ 475           | Economic Problems of India                                      |
|            | Govt 251           | The Politics of Economic Life                                   |
|            | Govt 356/ILRIC 337 | New Europe: Labor, Business and Politics                        |
|            | Govt 405           | Government and the Economy                                      |
|            | Govt 433           | The Politics of Economic Liberalization in the Developing World |
|            | ILRIC 333/533      | Western Europe, U.S., and Japan in a Changing World Economy     |
|            | ILRIC 637          | Labor Relations in Asia   |

**Group 2: World Politics and Foreign Policy**

|            |                       |   |
|------------|-----------------------|---|
| Core:      |                       |   |
| Electives: | Govt 336              | Postcommunist Transitions                       |
|            | Govt 341              | Modern European Society and Politics            |
|            | Govt 349              | Political Role of the Military                  |
|            | Govt 380              | Politics of Modern Germany                      |
|            | Govt 387              | Political Psychology in International Relations |
|            | Hist 223              | Modern European Political History               |
|            | Hist 230              | History & Memory: Asian-Pacific War             |
|            | Hist 243              | China & the West Before Imperialism             |
|            | Hist 244              | History of Siam and Thailand                    |
|            | Hist 293              | History of China up to Modern Times             |
|            | Hist 295              | Colonial Latin America                          |
|            | Hist 353/370/JwSt 353 | History of the Holocaust                        |
|            | Hist 379              | The First World War                             |
|            | Hist 385              | Europe in the 20th Century: 1968-1990           |
|            | Hist 414              | Motivations of U.S. Foreign Policy              |

**Group 3: Transnational Processes and Policies**

[NO CORE]

- Electives: B&Soc 461 Environmental Policy (1-year course)
- Comm 426 Impact of Communication Technologies
- Govt 294/  
Phil 294 Global Thinking
- Govt 389 International Law
- Govt 469/  
Phil 369 Limiting War
- Govt 483/  
S&TS 483 The Military and New Technology
- Intag 300 Perspectives in International Agriculture and Rural Development
- NtRes 400 International Environmental Issues
- RSOC 430 Migration and Population Distribution
- RSoc 438 Social Demography

**Group 4: Cultural Studies**

- Core: Anthr 200 Cultural Diversity and Contemporary Issues
- Anthr 321/  
Womns 321 Sex and Gender in Cross-Cultural Perspective
- Anthr 324 Anthropology Amongst Disciplines
- Anthr 400 The Craft of Anthropology
- Anthr 460 Culture and International Order
- Electives: Anthr 339 Peoples & Cultures of the Himalayas
- Anthr 345 Japanese Society
- AS&RC 191 Africa the Continent & Its People
- AS&RC 290 The Sociology of the African-American Experience
- AS&RC 451 Political and Sociological Change in the Caribbean
- AS&RC 478 Family and Society in Africa
- AS&RC 483 History of African Political Thought
- Asian 208 Intro to Southeast Asia
- Asian 215 Introduction to South Asian Civilization
- Asian 481 Translation and Identities
- Com L 353 European Cultural History 1870-1945
- Com L 363 The European Novel
- Com L 389 Contemporary Literature: Central/Eastern Europe
- Com L 455 Caribbean Literature
- Engl 353 Postcolonial Literature (Caribbean Literature)
- Hist 151 Introduction to Western Civilization

- Hist 220 The French Experience: An Introduction
- Hist 281/  
S&TS 281 Science in Western Civilization
- Hist 363 European Cultural History, 1870-1945
- Hist 478 Stalinism as Civilization
- JwSt 236/  
Nes 236 Israel: Literature and Society
- Nes 157/  
RelSt 157 Intro to Islamic Civilization
- Nes 291 Arab Society and Culture

**Language Requirement**

IR Concentrators are expected to complete additional language study beyond the College of Arts and Sciences degree requirement. This study can be accomplished in one of two ways:

- 1) Two years of one foreign language (proficiency plus one course)
- 2) Two languages at proficiency

**Study Abroad**

IR Concentrators are strongly encouraged to study abroad to bring a practical dimension to their expertise in international issues. Those who choose this option will find the requirements for the concentration highly compatible with study abroad.

*All courses used to fulfill the concentration requirements must be taken for a letter grade.* Transcripts will reflect successful completion of the requirements for the concentration. In addition, students will receive a special certificate signed by the faculty coordinator of the international relations concentration. Students interested in pursuing the concentration should discuss it with their faculty adviser. To enroll and for further information, contact Anindya Saha, Administrative Coordinator, IRC, at the Mario Einaudi Center for International Studies, 158 Uris Hall (as87@cornell.edu) or contact the director, Prof. Mathew Evangelista (Government), (255-8672/mae10@cornell.edu).

**Center for International Studies**

See Interdisciplinary Centers, Programs, and Studies.

**Program of Jewish Studies**

D. I. Owen, director (Ancient Near Eastern and Biblical History and Archaeology), L. Adelson (German-Jewish Literature and Culture), R. Brann (Judeo-Arabic Studies), V. Caron (Modern French and European-Jewish History), M. Diesing (Yiddish Language and Linguistics), N. Furman (French Holocaust Literature), K. Haines-Eitzen (New Testament and Early Christianity), Y. Halevi-Wise (Modern Hebrew Literature), R. Hoffmann (Holocaust Studies), P. Hyams (Medieval Jewish History), D. LaCapra (Holocaust Studies), R. Polenberg (American-Jewish History), J. Porte (American-Jewish Writers), D. S. Powers (Arabic and Islamic Studies), G. Rendsburg (Biblical and Semitic Studies), J. Rosberg (Modern Middle East), N. Scharf (Hebrew Language), D. Schwarz (Anglo-Jewish Literature), G. Shapiro (Russian-Jewish Literature), S. Shoer (Hebrew Language),

M. Steinberg (German-Jewish History and Culture), Y. Szekeley (Judaica Bibliography), J. Zorn (Biblical Archeology)

The Program of Jewish Studies was founded as an extension of the Department of Semitic Languages and Literatures, now the Department of Near Eastern Studies, in 1973 and attained status as an intercollegiate program in 1976.

The program has grown out of the conviction that Judaica civilization merits its own comprehensive and thorough treatment and that proper understanding of any culture is inconceivable without adequate knowledge of the language, literature, and history of the people that created it. Accordingly, the offerings in the areas of Jewish languages and literatures have been considerably expanded, and courses in ancient, medieval, and especially modern Jewish history and culture have been added to the program.

It is a broadly based, interdisciplinary program, bringing together faculty from various Cornell departments and colleges.

The Program of Jewish Studies supports teaching and research in the many areas of Jewish Studies. It is a secular, academic program, whose interests are diverse and cross-cultural. The program recognizes its special relationship to teaching and research in classical Judaica and Hebraica pursued by the members of the Department of Near Eastern Studies.

It presently enables students to obtain basic instruction and specialization in the fields of Semitic languages; the Hebrew Bible; medieval and modern Hebrew literature; ancient, medieval, and modern Jewish history; and Holocaust studies. In some of these fields students may take courses on both graduate and undergraduate levels. Faculty throughout the university provide breadth to the program by offering courses in related areas of study.

**Courses Offered**

**JWST 105-106 Elementary Modern Hebrew I and II (also NES 101-102)**  
105 fall; 106 spring. 6 credits. S. Shoer.  
For description, see NES 101-102.

**JWST 201-202 Intermediate Modern Hebrew I and II (also NES 201-202)**  
201 fall; 202 spring. 4 credits. N. Scharf.  
For description, see NES 201-202.

**JWST 227 Introduction to the Prophets (also NES 227, RELST 227)**  
Fall. 3 credits. G. Rendsburg.  
For description, see NES 227.

**JWST 229 Introduction to the New Testament (also NES 229, RELST 229)**  
Fall. 3 credits. K. Haines-Eitzen.  
For description, see NES 229.

**JWST 236 Israel: Literature and Society (also NES 236)**  
Fall. 3 credits. Y. Halevi-Wise.  
For description, see NES 236.

**JWST 244 Introduction to Ancient Judaism (also NES 244, RELST 244)**  
Spring. 3 credits. G. Rendsburg.  
For description, see NES 244.

**JWST 253 From Medievalism to Modernity: The History of Jews in Early Modern Europe, 1492-1789 (also NES 245, HIST 285)**

Fall. 4 credits. V. Caron.  
For description, see NES 245.

**JWST 261 Ancient Seafaring (also NES 261, ARKEO 275)**

Fall. 3 credits. D. Owen.  
For description, see NES 261.

**JWST 263 Introduction to Biblical History and Archeology (also RELST 264, ARKEO 263 and NES 263) @ #**

Spring. 3 credits. Staff.  
For description, see NES 263.

**JWST 271 Yiddish Linguistics (also LING 241)**

Fall. 4 credits. M. Diesing.  
For description, see LING 241.

**JWST 290 History of Zionism & the Birth of Israel (also NES 290, HIST 267)**

Spring. 3 credits. V. Caron.  
For description, see HIST 267.

**JWST 295 Introduction to Christian History (also NES 295, RELST 295)**

Spring. 3 credits. K. Haines-Eitzen.  
For description, see NES 295.

**JWST 301-302 Advanced Modern Hebrew I and II (also NES 301-302) @**

301 fall; 302 spring. 4 credits. N. Scharf.  
For description, see NES 301-302.

**JWST 353 History of the Holocaust (also HIST 370)**

Fall. 4 credits. V. Caron.  
For description, see HIST 370.

**JWST 390 Modern History of the Middle East: Changing Politics, Society and Ideas (also NES 390, GOVT 358)**

Fall. 4 credits. J. Rosberg.  
For description, see NES 390.

**JWST 400 Seminar in Advanced Hebrew (also NES 400)**

Fall and spring. 4 credits. Enrollment limited to 15 students. N. Scharf.  
For description, see NES 400.

**JWST 420 Readings in Biblical Hebrew Prose (also NES 420, RELST 420)**

Spring. 4 credits. G. Rendsburg.  
For description, see NES 420.

**JWST 446 History of Jews in Modern France (also HIST 417, FRLIT 413)**

Spring. 4 credits. V. Caron.  
For description, see HIST 417.

**JWST 491-492 Independent Study-Undergraduate**

Fall and spring. Variable credit. Staff.

**JWST 494 Studies in the Novel: Reading Joyce's *Ulysses* (also ENG 470)**

Spring. 4 credits. D. Schwarz.  
For description, see ENG 470.

**JWST 499 Independent Study-Honors**

Fall and spring. Variable credit. Staff.

**JWST 694 Joyce's *Ulysses* and the Modern Tradition (also ENG 670)**

Spring. 4 credits. D. Schwarz.  
For description, see ENG 670.

**Courses Not offered 1998-99.**

JWST 197 Introduction to the Near Eastern Civilization (also NES 197 and RELST 197)

JWST 223 Introduction to the Bible (also NES 223 and RELST 223)

JWST 239 Cultural History of the Jews of Spain (also COM L 239, NES 239, RELST 239, and SPAN L 239)

JWST 248 Introduction to Classical Jewish History (also RELST 248 and NES 248)

JWST 251 The Holocaust: The Destruction of European Jewry

JWST 339 Muslims, Christians, and Jews in Islamic Spain: Literature and Society (also NES 339/639, COM L 334, RELST 334, SPANL 339/699) @ #

JWST 342 Jewish Mysticism (also RELST 344 and NES 344) #

JWST 344 The History of Early Christianity (also NES 324, CLASS 344 and RELST 325)

JWST 346 Seminar in 19th-Century Jewish Intellectual History (also NES 347 and RELST 346)

JWST 347 Gender and Judaism (also WOMNS 347, RELST 343, NES 345)

JWST 352 The Transformation of European Jewry (also HIST 389)

JWST 428 Medieval Hebrew Biblical Exegesis (also NES 428, NES 624 and RELST 428)

JWST 435-436 Aramaic I & II (also NES 435-436) @ #

JWST 442 German Jewish Culture: From the Enlightenment to the Present (also GERST 442 and S HUM 442)

JWST 454 Anti-Semitism and the Crisis of Modernity: From the Enlightenment to the Holocaust (also HIST 435)

JWST 478 Jewish-American Writing (also ENGL 479 and AM ST 479)

### John S. Knight Writing Program

The director of the John S. Knight Writing Program is Jonathan Monroe, professor in the Department of Comparative Literature and George Elliott Reed Professor of Writing and Rhetoric. Katherine Gottschalk, senior lecturer in the Department of English, is the Walter C. Teagle Director of Freshman Writing Seminars. The program's offices are in 159 Goldwin Smith Hall, 255-4061.

M. Gilliland (Writing Workshop), K. Hjortshoj (Writing Workshop), B. LeGendre (Writing Workshop), J. Martin (Writing Workshop), J. Pierpont (Writing Workshop), E. Shapiro, (Writing Workshop).

The John S. Knight Writing Program helps to coordinate the teaching of writing for undergraduates in six of the university's schools and colleges (the School of Industrial and Labor Relations and the colleges of Agriculture and Life Sciences; Architecture, Art, and Planning; Arts and Sciences; Engineering; and Human Ecology). The program administers writing seminars for freshmen and upperclass students, tutorial writing classes, and seminars in the teaching of writing. More than thirty academic departments and programs participate in the program.

### Advanced Writing Seminars

For upperclass students, the program collaborates with the Department of English in offering English 288-89, "Expository Writing." This course helps students write with more confidence and skill in all disciplines, while

provoking inquiry into particular areas of study, forms or uses of writing, or topics intimately related to the written medium. Students may choose among a variety of sections focusing on such themes as "Writing about the Social World," "Writing in the Humanities," "Issues and Audiences," "Understanding the News," and "The Languages of Science."

### Freshman Writing Seminars

For freshmen the program offers the freshman writing seminars—more than 125 different courses in the humanities, social sciences, expressive arts, and sciences. Through introductory work in a particular field of study, seminars help students write good English expository prose—prose that, at its best, is characterized by clarity, coherence, intellectual force, and stylistic control. All seminars pursue this common aim through small classes, with a maximum of seventeen students, and adherence to a program-wide set of guidelines:

- Seminars require at least six—and at most twelve—formal writing assignments on different topics, totaling a minimum of thirty pages. (Some of the 30-page total may include major drafts.)
- A minimum of two of the required essays (see above) are developed through several stages of revised drafts under the instructor's guidance so that the revisions stand as substantially improved essays.
- All seminars spend ample classroom time on work directly related to writing.
- Reading assignments in the course subject are kept under 75 pages per week to permit regular, concentrated work on writing.
- All students meet in at least two individual conferences with the instructor.

Offerings change from semester to semester. Each term's freshman writing seminars are described in a brochure available from college registrars.

To ensure that students will enjoy the benefits of small writing classes, freshman writing seminars are limited to no more than seventeen students. Instead of pre-enrolling in their writing courses, students request placement in one of five writing seminars by filling out ballots available from their college registrars. Over ninety percent receive one of their top three choices. In the fall, students may change their writing seminars at the Freshman Writing Seminar Exchange; and in the spring, students may change their writing seminars at the University Course Exchange. Changes can also be made at special Freshman Writing Seminar add/drop sessions held during the first two weeks of each semester.

The colleges and the school served by the program accept freshman writing seminars in fulfillment of their individual graduation requirements in categories referred to variously as "freshman writing," "oral and written expression," and the like. The program does not decide whether students may graduate: it makes courses available. Individual colleges and schools administer their own graduation requirements.

Currently, most undergraduate students are required to take two freshman writing seminars. Architecture majors, however, need

only one. Hotel students fulfill their requirement through Hotel Administration 165, which should be taken with Hotel Administration 265 during the first two semesters at Cornell. Agriculture and Life Sciences students can take freshman writing seminars or choose from among a variety of other courses to fulfill their requirement.

All students who score "4" or "5" on the Princeton Advanced Placement Examination in English receive three credits. Such credits are awarded automatically; no application to the John S. Knight Writing Program or the Department of English is necessary. How these credits may be applied to freshman writing or other distribution requirements depends on the student's college and score. All students who score "5," except Architecture majors, may apply their three credits towards the writing requirements of their college. Of students who score "4," only Agriculture and Life Sciences students and Industrial and Labor Relations students may apply their three credits toward the writing requirements of their college. Students should always consult their college registrars to be certain that they understand their writing requirements.

Students who have already taken a freshman writing seminar, or who score "4" or "5" on the Princeton AP exam, or "700" or better on the English Composition or CEEB tests, may enroll, space permitting, in the following upper-level freshman writing seminars: English 270, 271, or 272.

Although there are no exemptions from college writing requirements, some students may fulfill all or part of their college's writing requirement through transfer credits or writing-course substitutions.

For work done at other institutions to be accepted as equivalent to freshman writing seminars, students should demonstrate that they have done a reasonably equivalent amount of writing in a formal course. (It is not sufficient to write, for example, one thirty-page term paper.) Students in the College of Engineering and the College of Arts and Sciences must file an "application for transfer evaluation" to request writing credit for such courses; students in other colleges should consult their college registrars.

In unusual circumstances, upper-level students may petition to use a Cornell writing course other than a freshman writing seminar to satisfy part of their writing requirement. The John S. Knight Writing Program must approve all such petitions in advance.

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in late October for the spring term.

### Teaching Writing

Each summer and fall, the program offers instruction in the teaching of writing to new staff members in the freshman writing seminars and other interested instructors. Teaching Writing I, offered in the summer, is primarily a course for graduate students; the same course is offered in the fall as Teaching Writing II. The program also sponsors a summer apprenticeship program for a limited number of graduate students, and a summer seminar for faculty members interested in the teaching of writing.

### Writing Workshop

The John S. Knight Writing Program offers An Introduction to Writing in the University for freshmen (or transfer students needing writing credit) through the Writing Workshop. This course is designed for students who have had little training in composition or who have serious difficulty with writing assignments.

Writing 137 and 138 are graded S-U only, and students receiving a grade of S are granted credit toward their college writing requirements. Students who think this course might be appropriate, including non-native speakers of English scoring less than 600 on the Test of English as a Foreign Language (TOEFL), should attend the assessment sessions offered by the Writing Workshop during orientation week each fall. The workshop also offers a Walk-In Service (see below) to help students with problems in essay writing. The director is Joe Martin, senior lecturer in the Writing Workshop. The workshop offices are in 174 Rockefeller Hall, 255-6349.

### The Walk-In Service

Through the Walk-In Service, the Writing Workshop offers tutoring assistance in writing to any student who needs help with a writing project. The Walk-In Service has tutors available during the academic year in 174 Rockefeller and north- and west-campus residential areas. The director is Mary Gilliland. For information contact the Writing Workshop, 174 Rockefeller Hall, 255-6349.

#### WRIT 137-138, 134 An Introduction to Writing in the University

137, fall; 138, spring; 134, summer.  
3 credits each term. Each section limited to 12 students in the fall and spring, 6 students in the summer. S-U grades only.  
Prerequisite: permission of instructor.

This writing seminar is designed for students who need more focused attention in order to master the expectations of academic writing. The course emphasizes the analytic and argumentative writing and critical reading essential for university-level work. With small classes and with weekly student/teacher conferences, each section is shaped to respond to the needs of students in that particular class.

#### WRIT 139-239 Special Topics in Writing

Spring. 139, undergraduate students only; 239, graduate students only. 3 credits.  
S-U grades only. Cannot fulfill any writing or distribution requirements. Prerequisite: permission of instructor.

These courses allow students the opportunity to resolve significant writing challenges that have interfered with their academic progress. Students must have ongoing writing projects on which to work. Instruction is in weekly tutorials. Interested students should come to 174 Rockefeller for more information.

### Latin American Studies

190 Uris Hall

D. Castillo, director; M. J. Dudley, associate director; L. Benería, R. Blake, D. Block, C. Castillo-Chávez, M. L. Cook, D. Cruz de Jesús, T. Davis, E. Dozier, B. Deutsch-Lynch, G. Fields, M. A. Garcés, W. Goldsmith, J. Haas, J.-P. Habicht, J. Henderson, T. Holloway, Z. Iguina, B. J. Isbell, S. Jackson, T. Jordan, J. Kronik, S. Kyle, D. R. Lee, L. Morató, J. Oliveira,

J. Piedra, T. Poleman, A. Power, E. Rodríguez, J. Routier-Pucci, D. Sanjur, V. Santiago, H. Schamis, R. Sierra, J. M. Stycos, J. M. Suárez, J. Tittler, H. Velez, L. Williams

The Latin American Studies Program encourages and coordinates faculty and student interests in Latin America. A variety of special lectures, films, and seminars supplement the regular course offerings. Graduate students may pursue a minor in Latin American Studies, while majoring in the field of their choice.

### Undergraduate Concentration

Undergraduate students may fulfill a Latin American Studies Concentration by completing a minimum of 15 credits in Latin American studies courses combined with language proficiency in Quechua, Spanish, or Portuguese. Latin American courses are offered in the College of Agriculture and Life Sciences; the College of Architecture, Art, and Planning; College of Arts and Sciences, College of Human Ecology; and the School of Industrial and Labor Relations.

For further information and a current course listing, students should contact the program office at 255-3345 or 190 Uris Hall.

### Latin American Studies Core Courses

Particular attention is drawn to the following courses that former students have taken to complete requirements for the undergraduate concentration or the graduate minor.

Other courses may be substituted with the approval of the advisor. It is strongly recommended that undergraduate concentrators take the interdisciplinary core course **SPANL320/LASP 301 Perspectives on Latin America**.

- ANTH 355 Archaeology of Mexico and Central America
- ANTH 485 & 685 Mothers, Priests, Rebels and Indian Chiefs: New Social Movement in Latin America
- CRP 371 Cuba: Searching for Development Alternatives
- ECON 425 Economic History of Latin America
- ECON 365 Economic Problems of Latin America
- GOVT 433 The Politics of Economic Liberalization in the Developing World
- GOVT 443-630 The Political Economy of Market Reform
- HIST 295 Colonial Latin America
- HIST 296 Latin America in the Modern Age
- HIST 347 Agrarian Societies in Latin American History
- INTAG 402 Agriculture in Tropical America
- INTAG 403 Traditional Agriculture in Developing Nations
- SPANL 318 Readings in Spanish-American Literature
- SPANL320/LASP 301 Perspectives on Latin America
- SPANL 332 The Modern Drama in Spanish America
- SPANL 350 Literature of Conquest
- SPANL 394 Trans-Atlantic Renaissance
- SPANL 395 Modern/Contemporary Andean Literature
- SPANL 498 Mallarmé in Latin America
- SPANL 625 Latin American Literature/Mass Media



## Latino Studies Program

434 Rockefeller Hall

The Latino Studies Program is an interdisciplinary academic program that focuses on the contributions, concerns, and welfare of those persons of Latino origin who reside in the United States. It includes support for historical, linguistic, literary, social, economic, and political studies of this diverse group of Americans. To this end the program objectives are (1) to expand the available course curriculum by providing both undergraduate and graduate courses pertaining to Latino subject matters; (2) to enlarge the size of the Latino faculty at Cornell through permanent appointments and visiting appointments; and (3) to enhance the Latino academic environment on campus through support of such activities as lectures, conferences, seminars, exhibits, and research activities.

### Undergraduate Concentration

The program's undergraduate concentration affords students an opportunity to develop a multidisciplinary approach to the study of Latinos in the United States. To complete an undergraduate concentration in Latino Studies, students must earn at least 15 credits including LSP 201/SOC 265: Latinos in the United States (offered each spring semester), and at least four other courses from the course list. Students should make an attempt to achieve breadth and depth in the concentration and should include courses at the 300 and 400 level. Students pursuing the concentration must meet with the LSP Advisor and file an application with the Latino Studies Program office.

### Resource Center

The Latino Studies Program Resource Center in 432 Rockefeller Hall serves Cornell students, faculty, staff, and the wider local community. The Resource Center holds print and media material pertinent to U.S. Latino issues and also provides a meeting space for more than 25 Latino student organizations.

### Courses

- LSP 201/SOC 265 Latinos in the United States**  
Spring. 4 credits variable.
- LSP 202/SPAND 200 Spanish for Bilinguals**  
Fall and spring. 3 credits.
- LSP/SPANL 210 Introduction to Latino Studies**  
4 credits variable.
- LSP/RSOC 220 Sociology of Health and Ethnic Minorities**  
Fall. 3 credits.
- LSP/ANTHRO 221 Anthropological Representation: Ethnographies on Latino Culture**  
Fall. 3 credits.
- LSP/ENGL 241 Introduction to Chicano/a Poetry and Politics**  
3 credits.
- LSP/ENGL 242 Chicanos and Film: Representations of La Raza**  
3 credits.
- LSP/ENGL/COML 243 Poetry and Politics in the Americas**  
4 credits.

**LSP/SPANL 246 Contemporary Narratives by Latina Writers**  
Fall. 3 credits.

**LSP/HISTORY 260 Introduction to U.S. Latino History (Part I)**  
Spring. 4 credits.

**LSP/HISTORY 261 Introduction to U.S. Latino History (Part II)**  
4 credits.

**LSP/SPANL 321 Puerto Rican Experience in the U.S.**  
Fall. 4 credits.  
One-time course offering by visiting professor.

**LSP/LING 366 Spanish in the United States**  
Spring. 4 credits.

**LSP/ANTHRO 377 The United States**  
4 credits.

**LSP/ENGL 393 Survey in U.S. Latina/o Literature**  
Fall. 4 credits.

**LSP/SPANL 396 Modern Latino Prose Fiction**

**LSP/ENGL 490 The Chicana Renaissance**  
Spring. 4 credits.

**LSP/ENGL 442 Testimonial Narratives: U.S. Latinos at War**  
4 credits.

**LSP 420/421 Independent Study**  
Permission of instructor. 2-4 credits variable.

**LSP/SPANL 482 U.S. Latino Culture and Literature**  
Fall. 4 credits.  
One-time course offering by visiting professor.

**LSP/ANTHRO 660 Latino Languages, Ideology, and Practice**  
Spring. 4 credits.

**LSP/ENGL 696 Writing Resistance: U.S. Minority and Third World Prisoner Discourses**

## Law and Society

D. A. Dunning, director, 280 Uris Hall, 255-6391, prh3@cornell.edu, R. Breiger (sociology), C. Carmichael (comparative literature), D. A. Dunning (psychology), G. Hay (economics), P. Hyams (history), S. Jasanoff (science and technology studies), M. Katzenstein (government), R. Miller (philosophy), M. B. Norton (history), R. Polenberg (history), D. Powers (Near Eastern studies), J. Rabkin (government), A. Rutten (government), H. Shue (Ethics and Public Life)

The Law and Society Program offers an interdisciplinary concentration for undergraduates who are interested in the law from the perspectives of the social sciences and the humanities: anthropology, comparative literature, economics, government, history, philosophy, psychology, science and technology studies, and sociology. Students who wish to graduate with a concentration in law and society should consult the director of the program or one of the advisors listed above to plan a coherent program of study. Admission to the concentration has to be approved by the director of the program. Such a program should ordinarily include at least four courses from the following list. At

least two of the courses should fall outside the student's major. Particular attention is drawn to GOVT 313 and PSYCH 265, which past students have often taken. Other courses may be substituted with the approval of the advisor. Inquiries can be directed to: Mary Newhart, Administrative Assistant, 119 Stimson Hall, 255-8515, mjn3@cornell.edu.

**AM ST 336 Capitalism and Society in Developing American, 1607-1877**  
(also HIST 336)

**AS&RC 280 Racism in American Society**  
(also HIST 280)

**ANTHR 328 Conflict, Dispute Resolution, and Law in Cultural Context**

**ASIAN 338 Democracy and War** (also HIST 338)

**B&SOC 406 Biotechnology and Law** (also S&TS 406)

**B&SOC 407 Law, Science, and Public Values** (also GOVT 407 and S&TS 407)

**COM L 326 Christianity and Judaism**  
(also RELS 326) #

**COM L 328 Literature of the Old Testament** (also RELS 328) @ #

**ECON 304 Economics and the Law**

**ECON 335 Public Finance and Resource Allocation**

**ECON 336 Public Finance: Resource Allocation and Fiscal Policy**

**GOVT 111 Introduction to Political Theory**

**GOVT 260 Social and Political Theory**  
(also PHIL 242)

**GOVT 294 Global Thinking** (also PHIL 294)

**GOVT 313 The Nature, Functions, and Limits of Law**

**GOVT 324 Legal Reasoning and Legal Adaptation**

**GOVT 327 Civil Liberties in the United States**

**GOVT 328 Constitutional Politics: The United States Supreme Court**

**GOVT 364 The Selfish Individual and the Modern World**

**GOVT 389 International Law**

**GOVT 407 Law, Science, and Public Values** (also B&SOC 407 and S&TS 407)

**GOVT 410 Legislatures, Courts and Public Policy**

**GOVT 428-429 Government and Public Policy: An Introduction to Analysis and Criticism**

**GOVT 462 Modern Political Philosophy**  
(also PHIL 346)

**GOVT 466 Feminism and Gender Discrimination** (also WOMNS 466)

**GOVT 469 Limiting War** (also PHIL 369)

**GOVT 474 Community, Nation, and Morality** (also PHIL 446)

- GOVT 489** International Law and Regime Development
- HD 234** Children and the Law
- HIST 318** American Constitutional Development
- HIST 336** Capitalism and Society in Developing America, 1607-1877 (also AM ST 336)
- HIST 338** Democracy and War (also ASIAN 338)
- HIST 368** Marriage and Sexuality in Medieval Europe (also WOMNS 368) #
- HIST 436** Conflict Resolution in Medieval Europe
- HIST 437-657** Sexuality, Society, and the State in the Near East (also NES 456-657 and WOMNS 455-655) @
- HIST 440** Undergraduate Seminar in Recent American History
- HIST 457-657** Women, Men, and the Law in Muslim Court (also NES 459-655, RELST 459 and WOMNS 458)
- NES 456-657** Sexuality, Society and the State in the Near East (also HIST 437-657 and WOMNS 455-655) @ #
- NES 459-655** Women, Men, and the Law in Muslim Court (also HIST 457-657, RELST 459 and WOMNS 459)
- PHIL 241** Ethics
- PHIL 242** Social and Political Theory (by petition for breadth requirement) (also GOVT 260)
- PHIL 294** Global Thinking (also GOVT 294)
- PHIL 319** Philosophy of Marx #
- PHIL 346** Modern Political Philosophy (also GOVT 462)
- PHIL 369** Limiting War (also GOVT 469)
- PHIL 444** Contemporary Legal Thought
- PHIL 446** Topics in Social and Political Philosophy (also GOVT 474)
- PSYCH 265** Psychology and Law
- RELST 326** Christianity and Judaism (also COM L 326)
- RELST 328** Literature of the Old Testament (also COM L 328)
- RELST 459** Women, Men, and the Law in Muslim Court (also HIST 457-657, NES 459-655 and WOMNS 458)
- S&TS 406** Biotechnology and Law (also B&SOC 406)
- S&TS 407** Law, Science, and Public Values (also GOVT 407 and B&SOC 407)
- SOC 310** Sociology of War and Peace
- SOC 354** Law and the Social Order
- WOMNS 368** Marriage and Sexuality in Medieval Europe (also HIST 368)
- WOMNS 455/655** Sexuality, Society, and the State in the Near East (also NES 456/657 and HIST 437-657)

**WOMNS 458** Women, Men, and the Law in Muslim Court (also HIST 457-657, NES 459-655 and RELST 459)

**WOMNS 466** Feminism and Gender Discrimination (also GOVT 466)

**ARME 320** Business Law I

**CE&H 365** Economics of Consumer Law and Protection

**CRP 380** Environmental Politics

**CRP 451-551** Environmental Law

**HSS 280** Racism in American Society (also AS&RC 280)

**ILRCB 607** Values in Law, Economics, and Industrial Relations

**NTRES 401** Environmental and Natural Resources Policies

### Lesbian, Bisexual and Gay Studies

E. Hanson, director, undergraduate studies, spring; B. Anderson, D. Bem, S. Bem, A. Berger, J. Borneman, B. Correll, J. Culler, I. DeVault, N. Furman, J. E. Gainor, I. V. Hull, M. Jacobus, K. Jones, M. Katzenstein, K. March, B. Martin, director, graduate studies; S. McConnell-Ginet, T. Murray, M. B. Norton, J. Peraino, J. Piedra, R. Savin-Williams, R. Schneider, A. M. Smith, A. Villarejo, director, undergraduate studies, fall; R. Weil

The field of Lesbian, Bisexual and Gay Studies is devoted to the interdisciplinary study of the social construction of sexuality. LBG Studies is founded on the premise that the social organization of sexuality is best studied from the perspectives offered by those positions that have been excluded from established cultural norms.

In addition to offering a graduate minor, the field of LBG Studies now offers an undergraduate concentration, which is administered under the auspices of the Women's Studies Program and which consists of four courses from the list below. Although most of the courses in LBG Studies (including those on men) will probably fall under the aegis of the Women's Studies Program and hence be crosslisted with it, not all of the courses in Women's Studies are sufficiently focused enough on the social construction of sexuality per se to be part of the LBG Studies concentration. In order to qualify for the concentration, courses must devote a significant portion of their time to sexuality and to questioning the cultural and historical institution of exclusive heterosexuality. Students selecting their four courses from the LBG Studies subset must identify their concentration as either LBG Studies or Women's Studies; they cannot double-count their credits and thereby use the same courses for both concentrations.

Students interested in the LBG Studies concentration should contact the Lesbian, Bisexual and Gay Studies Office in 379 Uris Hall.

#### Courses

**ANTHR 200** Cultural Diversity and Contemporary Issues

Fall. 3 credits. J. Borneman.  
For description, see ANTHR 200.

**ANTHR 321** Sex and Gender in Cross-Cultural Perspective (also WOMNS 321)

Fall. 4 credits. K. March.  
For description, see WOMNS 321.

**[ENGL 355** Decadence (also WOMNS 355)

4 credits. Not offered 1998-99.  
E. Hanson.]

**[ENGL 377** Gay Fiction (also WOMNS 376)

4 credits. Not offered 1998-99.  
E. Hanson.]

**ENGL 395** Video: Art, Theory, Politics (also THETR 395)

Fall. 4 credits. T. Murray.  
For description, see ENGL 395.

**[ENGL 424** Studies in Renaissance Lyric

4 credits. Not offered 1998-99.  
B. Correll.]

**ENGL 427** Shakespeare: Gender, Sexuality, Cultural Politics (also WOMNS 427)

Spring. 4 credits. B. Correll.  
For description, see ENGL 427.

**ENGL 654** Queer Theory (also WOMNS 654)

Spring. 4 credits. E. Hanson.  
For description, see ENGL 654.

**[ENGL 655** Decadence (also WOMNS 656/COM L 655)

4 credits. Not offered 1998-99.  
E. Hanson.]

**[ENGL 703** Theorizing Film: Race, Nation and Psychoanalysis (also FRLIT 695)

4 credits. Not offered 1998-99.  
T. Murray.]

**[FRLIT 493** French Feminisms (also WOMNS 493)

4 credits. Not offered 1998-99.  
N. Furman.]

**[GERST 413** The Women Around Freud (also WOMNS 413)

4 credits. Not offered 1998-99. B. Martin.]

**GOVT 353** Feminist Movements and the State (also WOMNS 353)

Fall. 4 credits. M. Katzenstein.  
For description, see GOVT 353.

**[GOVT 362** Politics of Sexuality (also WOMNS 262)

4 credits. Not offered 1998-99.  
A. M. Smith.]

**GOVT 415** Race, Gender, and Organization (also WOMNS 415)

Spring. 4 credits. M. Katzenstein and J. Reppy.  
For description, see GOVT 415.

**[GOVT 467** Radical Democratic Feminisms (also WOMNS 468)

4 credits. Not offered 1998-99.  
A. M. Smith.]

**HDFS 284** Introduction to Sexual Minorities (also WOMNS 285)

Fall. 3 credits. R. Savin-Williams.  
For description, see HDFS 284.

**HDFS 464** Sexual Minorities and Human Development (also WOMNS 467)

Spring. 3 credits. R. Savin-Williams.  
For description, see HDFS 464.

**[HIST 377 Gender in Early Modern Europe (also WOMNS 377)]**

Fall. 4 credits. Not offered 1998–99.  
R. Weil.]

**HIST 626 American Women's History (also WOMNS 626)**

Spring. 4 credits. M. B. Norton.  
For description, see HIST 626.

**LING 244 Language and Gender (also WOMNS 244)**

Spring. 4 credits. S. McConnell-Ginet.  
For description, see LING 244.

**PSYCH 277 Social Construction of Gender (also WOMNS 277)**

Fall. 3 credits. S. Bem.  
For description, see WOMNS 277.

**PSYCH 450/650 Lenses of Gender (also WOMNS 450/650)**

Spring. 4 credits. S. Bem.  
For description, see WOMNS 450/650.

**[SPAN L 384 Literature and Revolution]**

4 credits. Not offered 1998–99. J. Piedra.]

**[SPAN L 400 Maricoteoria/Queer Theory]**

4 credits. Not offered 1998–99. J. Piedra.]

**[THETR 336 American Drama and Theatre (also ENGL 336)]**

4 credits. Not offered 1998–99.  
J. E. Gainor.]

**[THETR 339 Theories and Techniques of 20th-Century Western Theatre]**

4 credits. Not offered 1998–99.  
R. Schneider.]

**[THETR 436 The Female Dramatic Tradition (also WOMNS 433)]**

4 credits. Next offered in 2–3 years.  
J. E. Gainor.]

**[THETR 637 Theatre and Postmodernity: Appropriation, Adaptation and Simulation]**

4 credits. Not offered 1998–99.  
R. Schneider.]

**WOMNS 210 Introduction to Feminist Theory**

Fall. 4 credits. A. Villarejo.  
For description, see WOMNS 210.

**WOMNS 441/641 Theater of Commodities: Feminism, Advertising, TV, and Performance (also THETR 439)**

Spring. 4 credits. A. Villarejo and  
R. Schneider.  
For description, see WOMNS 441/641.

**[WOMNS 465 Feminist Theory/Lesbian Theory (also GERST 465 and COM L 465)]**

4 credits. Not offered 1998–99. B. Martin.]

**[WOMNS 621 Lesbian, Gay, Bisexual Studies (also GERST 621)]**

4 credits. Not offered 1998–99. B. Martin.]

**Medieval Studies**

Danuta Shanzer, director; B. B. Adams, F. M. Ahl, C. M. Arroyo, R. Brann, K. W. Brazell, E. W. Browne, R. G. Calkins, R. T. Farrell, A. S. Galloway, A. B. Groos, W. E. Harbert, T. D. Hill, P. R. Hyams, J. J. John, C. V. Kaske, W. J. Kennedy, S. MacDonald, M. Migiel, J. M. Najemy, C. A. Peterson, J. R. Piggott, D. S. Powers, D. M. Randel, S. Senderovich, W. Wetherbee (emeriti); A. M. Colby-Hall, N. Kretzmann)

Undergraduates interested in Medieval Studies have an opportunity to take courses in the following areas of instruction: medieval Hebrew, Arabic, and Latin; Old English, Middle English, Old Irish, and Middle Welsh; Old Occitan (Provençal) and Old French; medieval Spanish and Italian; Old Saxon, Old High German, Middle High German, Gothic, and Old Norse; Old Russian and Old Church Slavonic; comparative literature; medieval archaeology, art, and architecture; medieval history; Latin paleography; medieval philosophy; musicology; comparative Slavic linguistics, comparative Romance linguistics, and comparative Germanic linguistics.

Undergraduates who want to undertake an independent major or a concentration in Medieval Studies should consult the director of the program, 259 Goldwin Smith Hall, 255–8545, medievalst@cornell.edu.

Information for prospective graduate students is contained in the catalog of the Graduate School, in a brochure on Medieval Studies available from the field coordinator, and at Cornell's site on the World Wide Web: <http://www.arts.cornell.edu/medieval>.

**Graduate Seminars**

Courses in various aspects of medieval studies are offered each year in numerous cooperating departments, including Asian Studies, Classics, Comparative Literature, English, German Studies, History, History of Art, Linguistics, Music, Near Eastern Studies, Philosophy, Romance Studies, Russian Literature and by the Society for the Humanities. An up-to-date listing of courses and their descriptions is available at the Medieval Studies office, 259 Goldwin Smith Hall.

**Modern European Studies Concentration**

Susan Tarrow, coordinator

Students from any college may choose an undergraduate concentration in Modern European Studies to complement any major in any college. The purpose of the concentration is to provide a coherent structure for students with an interest in interdisciplinary study in the field of European studies.

The concentration has three tracks: European politics, economics and society; modern European history; and European culture. The requirements for the concentration are:

- 1) Competence in at least one modern European language, Romance, Germanic or Slavic (i.e., completion of a 300-level course or equivalent with a grade of at least B-, or demonstration of an advanced level of competence in an oral proficiency interview test where available).
- 2) Completion of two interdisciplinary core courses:

**Government 341/Sociology 341: Modern European Society and Politics**

Fall 1998. 4 credits. T R 11:40–12:55.  
S. Tarrow.

**Comparative Literature 311/Russian Literature 311/French Literature 315: Modern European Literature and Culture**

Spring 1999. 4 credits. G. Gibian.

Under certain conditions, students may be permitted to substitute other courses for those listed above.

- 3) Completion of one course in modern (post-1789) European history.
- 4) Two additional courses in any of the three areas, which may include a senior seminar (400 level).
  - a) Courses in European and comparative politics, anthropology, sociology, women's studies, and related courses in the School of Hotel Administration, the College of Agriculture and Life Sciences, and the School of Industrial and Labor Relations.
  - b) Courses in modern European history (post-1789).
  - c) Courses in (post-1789) English and European literatures, comparative literature, semiotics, fine arts, architecture, music, philosophy, film and theatre arts, and women's studies.

Only two courses may be used to satisfy requirements for both the major and the concentration. Courses satisfying the breadth and distribution requirements in the College of Arts and Sciences, however, *may* be applied to the concentration. Students interested in completing a research project under the European Summer Research Program may apply for The Wood Fellowship in their junior year. All concentrators are encouraged to participate in the Language House Program, and to spend a semester or more in a program of study in Europe. Courses taken abroad may be applied to the concentration if they are approved for Cornell credit.

Undergraduates in the College of Arts and Sciences can major in European Studies through the Independent Major or College Scholar programs.

Departmental advisers include: J. Borneman (Anthropology); C. Otto (Architecture); L. Abel (College Scholars, Independent Majors); S. Christopherson (CRP); G. Fields (Economics); D. Schwarz (English); I. Ezergailis (German Studies); J. Pontusson (Government); J. Weiss (History); M. Suter (Linguistics); C. Rosen (Modern Languages); N. Zaslaw (Music); S. Tarrow (Romance Studies); G. Gibian (Russian Literature); S. G. Tarrow (Sociology); D. Bathrick (Theatre Arts)

For a list of relevant courses and seminars, and any further information, contact Susan Tarrow, coordinator of the Modern European Studies Concentration, at the Institute for European Studies, 120 Uris Hall (telephone 255–7592, e-mail [SRT2@cornell.edu](mailto:SRT2@cornell.edu)).

**Religious Studies**

J. M. Law, director; C. M. Arroyo, K. Barzman, P. Becker, J. Bishop, R. Brann, R. G. Calkins, C. M. Carmichael, K. Clinton, J. Fajans, D. Fredericksen, J. W. Gair, D. Gold, S. Greene, J. S. Henderson, T. D. Hill, D. Holmberg, P. R. Hyams, J. J. John, C. V. Kaske, W. J. Kennedy, A. T. Kirsch, J. Maas, S. MacDonald, D. Mankin, K. S. March, C. Minkowski, R. L. Moore, E. Ondrako, D. I. Owen, J. R. Piggott, D. S. Powers, D. M. Randel, G. Rendsburg, J. S. Rusten, P. S. Sangren, D. R. Shanzer, M. Washington (emeritus); N. Kretzmann)

The program in Religious Studies is designed to meet the needs of three classes of students: those seeking interesting courses on religious topics as free electives or to fulfill distribution requirements; those desiring a more systematic exposure to the academic study of religion as a major component of their liberal arts experience; and those planning to pursue advanced academic work in religious studies or allied disciplines or subdisciplines (e.g., history of religions, anthropology, religion and literature, religion and psychology, ethics, or theology, as well as certain geographical area studies). To all these students the program offers an opportunity to acquire a fuller understanding and appreciation of one of the most fundamental aspects of human thought and behavior.

### The Major in Religious Studies

To graduate as a major in Religious Studies, a student must (1) complete with letter grades the program's two core courses, Religious Studies 101 ("Understanding the Religions of the World") and Religious Studies 449 ("History and Methods of the Academic Study of Religion"); and (2) complete with letter grades eight additional courses approved for the major, at least four of them at the 300 level or above. The following specifications of this second requirement are designed to promote breadth (2a) and depth (2b) of study.

(2a) At least four of a major's eight additional courses are to be selected to ensure some familiarity with two or more different religions, religious traditions, or religious phenomena. These courses may be at the introductory or advanced levels. For example, "Introduction to Asian Religions" (Asian Studies 250) might lead a student to take "The Religious Traditions of India" (Asian Studies 351), and then to combine these with two courses on Judaism, "Introduction to Ancient Judaism" (Near Eastern Studies 244) and "Seminar on Jewish Mysticism" (Near Eastern Studies/Jewish Studies 344). Or a student might take four unrelated courses such as "Introduction to the Bible" (Near Eastern Studies/Jewish Studies 223), "Religion and Reason" (Philosophy 263), "Myth, Ritual, and Symbol" (Anthropology 320), and "History of the Near East: 1250-1914" (Near Eastern Studies 258) to gain a sense of the range of intellectual activity associated with the academic study of religious traditions and religious practices.

(2b) At least two of these eight additional courses are to be selected to ensure depth of coverage in one religion or one group of closely related religions, religious traditions, or religious phenomena. In the first illustrative case described above, the student might combine "The Religious Traditions of India" with "Tantric Traditions" (Asian Studies 347) or "Classical Indian Philosophical Systems" (Asian Studies/Classics 395) to acquire a measure of specialist strength in the religions of India. Alternatively, that student might combine "Introduction to Asian Religions" with one or more courses dealing with Buddhism, such as "Indian Buddhism" (Asian Studies 354) or "Japanese Buddhism" (Asian Studies 359), to develop an appropriate depth along a different dimension.

No more than one of the courses chosen to meet requirement 2a may be used to satisfy requirement 2b.

To engage in the kind of focused study envisioned under 2b, a student will be expected to attain proficiency in a language other than English to gain access to relevant sources, primary or secondary. For example, a knowledge of Greek or Latin might be required for the study of Christianity (as well as Greek or Roman religions); of Hebrew or Aramaic for Judaism; of Arabic for Islam; of Sanskrit or Hindi for Hinduism; of Pali or Chinese or Japanese for Buddhism. Religious phenomena like shamanism or totemism, though less firmly rooted in literary traditions, have generated substantial bodies of important scholarship in French and German, and an undergraduate major concentrating in this area of Religious Studies should be equipped to make independent use of such material. Courses used to satisfy this foreign language proficiency requirement may not be applied to the course requirements described under 2a and 2b. Choice of language to fulfill this requirement is determined by the student in consultation with his or her adviser and is decided at the time the student enters the major.

Most courses approved for the major are offered by cooperating departments within the College of Arts and Sciences; a comprehensive up-to-date list of these courses is maintained at the office of the Religious Studies Program, 259 Goldwin Smith Hall.

Given the multidisciplinary character of the program in Religious Studies, it is especially important for a prospective major to select a faculty adviser early on. A current list of advisers is available from the program director. Once an adviser has been selected, a student is expected to prepare a brief statement outlining his or her intended course of major study (including study of an appropriate foreign language). This program of study should be signed by the student's adviser and filed with the program director for review by the faculty committee responsible for overseeing the program.

### The Major with Honors in Religious Studies

To be eligible for honors in Religious Studies, a student must maintain a GPA of 3.0 overall and 3.3 in courses other than language courses used to satisfy requirements for the major. In addition, he or she must enroll in Religious Studies 495 ("Senior Honors Essay"), in the fall and spring of the senior year. Each semester course carries four credits but only the first may be counted as one of the eight additional courses required for the major. Religious Studies 490, 491 ("Directed Study," in the fall and spring, respectively), and 495 are supervised by cooperating faculty members assigned to individual honors students or small groups of honors students to help them complete substantial independent projects. Students must obtain permission from their honors committee at the end of fall semester in order to continue toward completion of the honors thesis. The final honors projects will be evaluated by the Religious Studies Honors Committee, which is responsible for awarding honors and determining the degree of honors awarded.

### Courses Approved for the Major Sponsored by Religious Studies

#### RELST 101 Understanding the Religions of the World @ #

Fall. 3 credits. Required of Religious Studies majors. J. M. Law.

This course provides a dynamic introduction to the academic study of religion as an intellectual discipline through an overview of the world's major religious traditions including Hinduism, Buddhism, Taoism, Confucianism, Shinto (in Japan), Judaism, Christianity, and Islam. The focus of this year's course will be on religious personages—founders, reformers, and followers, and in some traditions, divine beings. For each religious system, we will focus on 1) the dynamics of founding and promulgation; 2) core rituals, myths, doctrines, and texts; 3) changing understandings of community and identity; and 4) conceptions of the human-divine relationship. To highlight our studies throughout the semester, we will explore how these themes of religious tradition get expressed through vibrant narratives—both oral and written. Representatives of many of the religions will address the class to discuss their lives in relationship to their religious tradition. Course work will include readings in primary source materials in translation and hands-on ethnographic work with local religious communities.

#### RELST 131 Elementary Pali (also PALI 131)

Fall. 3 credits. J. Gair.  
For description, see Modern Languages, PALI 131.

#### [RELST 150 Introduction to American Religion (also Sociology 150)]

Fall. 3 credits. Not offered 1998-99.  
P. Becker.]

#### RELST 157 Introduction to Islamic Civilization I (also Near Eastern Studies 157)

Fall. 3 credits. D. Powers.  
For description, see NES 157.

#### [RELST 197 Introduction to Near Eastern Civilization (also Near Eastern Studies 197, Jewish Studies 197) @ #

Fall. 3 credits. Not offered 1998-99.  
D. Owen.]

#### RELST 203 Religion and Family in the U.S. (also Sociology 201, Rural Sociology 202)

Fall. 3 credits. P. Becker.  
For description, see SOC 201.

#### [RELST 213 Introduction to the Qur'an (also Near Eastern Studies 213) @ #

Spring. 3 credits. Not offered 1998-99.]

#### [RELST 223 Introduction to the Bible (also Near Eastern Studies 223, Jewish Studies 223) @ #

Spring. 3 credits. Not offered 1998-99.]

#### RELST 227 Introduction to the Prophets (also Near Eastern Studies 227, Jewish Studies 227)

Fall. 3 credits. G. Rendsburg.  
For description, see NES 227.

#### RELST 229 Introduction to the New Testament (also Near Eastern Studies 229, Jewish Studies 229)

Fall. 3 credits. K. Haines-Eitzen.  
For description, see NES 229.



**RELST 230 Monuments of Medieval Art (also History of Art 230) #**  
Spring. 4 credits. R. G. Calkins.  
For description, see ART H 230.

**[RELST 231 The Quest for the Historical Jesus (also Near Eastern Studies 230)]**  
Spring. 3 credits. Not offered 1998–99.]

**[RELST 234 Arabs and Jews: Cultures in Confluence (also Near Eastern Studies 234, Jewish Studies 234, Comparative Literature 234) @ #**  
Fall. 3 credits. Not offered 1998–99.  
R. Brann.]

**[RELST 239 Cultural History of Jews of Spain (also Near Eastern Studies 239, Jewish Studies 239, Spanish Literature 239)]**  
Fall. 3 credits. Not offered 1998–99.  
R. Brann.]

**RELST 244 Introduction to Ancient Judaism (also Near Eastern Studies 244, Jewish Studies 244) @ #**  
Spring. 3 credits. G. Rendsburg.  
For description, see NES 244.

**[RELST 248 Introduction to Classical Jewish History (also Near Eastern Studies 248, Jewish Studies 248) @ #**  
Fall. 3 credits. Not offered 1998–99.]

**RELST 250 Introduction to Asian Religions (also Asian Studies 250) @ #**  
Spring. 3 credits. D. Boucher.  
For description, see ASIAN 250.

**RELST 251 Black Religious Traditions from Slavery to Freedom (also History 251, American Studies 251)**  
Fall. 4 credits. M. Washington.  
For description, see HIST 251.

**[RELST 252 Introduction to Islam: Religion, Politics, and Society (also Near Eastern Studies 251) @ #**  
Spring. 3 credits. Not offered 1998–99.]

**[RELST 257 Islamic History 600–1258 (also Near Eastern Studies 257, History 254) @ #**  
Fall. 3 credits. Not offered 1998–99.  
D. Powers.]

**[RELST 258 History of the Near East: 1250–1914 (also Near Eastern Studies 258, History 248) @ #**  
Fall. 3 credits. Not offered 1998–99.]

**RELST 262 Religion and Reason (also Philosophy 263)**  
Spring. 4 credits. S. MacDonald.  
For description, see PHIL 263.

**[RELST 263 The Earlier Middle Ages (also History 263) #**  
Fall. 4 credits. Not offered 1998–99.  
J. J. John.]

**RELST 264 Introduction to Biblical History and Archaeology (also Near Eastern Studies 263, Jewish Studies 263, Archaeology 263) @ #**  
Spring. 3 credits. Staff.  
For description, see NES 263.

**RELST 265 The Middle Ages: An Introduction (also History 262)**  
Fall. 4 credits. P. Hyams.  
For description, see HIST 262.

**RELST 295 Introduction to Christian History (also Near Eastern Studies 295)**  
Spring. 3 credits. K. Haines-Eitzen.  
For description, see NES 295.

**RELST 297 Gender, Sexuality, and the Body in Early Christianity (also Near Eastern Studies 296, Women's Studies 296)**  
Spring. 3 credits. K. Haines-Eitzen.  
For description, see NES 296.

**RELST 313 Classical Arabic Texts (also Near Eastern Studies 313)**  
Fall. 4 credits. Prerequisite: NES 311 or equivalent. D. Powers.  
For description, see NES 313.

**[RELST 315 Medieval Philosophy (also Philosophy 315) #**  
Spring. 4 credits. Not offered 1998–99.  
S. MacDonald.]

**RELST 320 Myth, Ritual and Symbol (also Anthropology 320) @**  
Spring. 3 or 4 credits. J. Fajans.  
For description, see ANTHR 320.

**RELST 322 Magic, Myth, Science and Religion (also Anthropology 322) @**  
Fall. 4 credits. A. T. Kirsch.  
For description, see ANTHR 322.

**[RELST 328 Literature of the Old Testament (also Comparative Literature 328) @ #**  
Fall. 4 credits. Not offered 1998–99.  
C. Carmichael.]

**RELST 332 Architecture in the Middle Ages (also History of Art 332, Architecture 382)**  
Fall. 4 credits. R. G. Calkins.  
For description, see ART H 332.

**RELST 333 Greek and Roman Mystery Cults and Early Christianity (also Classics 333, Archaeology 333) #**  
Spring. 4 credits. A previous course in Classics (civilization or language) or RELST 101 is recommended. K. Clinton.  
For description, see CLASS 333.

**[RELST 334 Muslims, Christians and Jews in Islamic Spain: Literature and Society (also Near Eastern Studies 339/639, Jewish Studies 339, Comparative Literature 334, Spanish Literature 339/639) @ #**  
Spring. 4 credits. Not offered 1998–99.  
R. Brann.]

**RELST 335 Subsistence, Polity, and Worldview in Mainland Southeast Asia (also Anthropology 335)**  
Spring. 4 credits. A. T. Kirsch.  
For description, see ANTHR 335.

**RELST 337 The Medieval Illuminated Book (also History of Art 337) #**  
Fall. 4 credits. R. G. Calkins.  
For description, see ART H 337.

**[RELST 342 Flemish Painting (also History of Art 341) #**  
Fall. 4 credits. Not offered 1998–99.  
R. G. Calkins.]

**[RELST 343 Gender and Judaism (also Near Eastern Studies 345, Jewish Studies 347)]**  
Spring. 4 credits. Not offered 1998–99.]

**[RELST 344 Seminar on Jewish Mysticism (also Near Eastern Studies 344) #**  
Fall. 4 credits. Not offered 1998–99.]

**RELST 345 Intellectual and Cultural Life of 19th Century Americans (also History 345, American Studies 345) #**  
Fall. 4 credits. R. L. Moore.  
For description, see HIST 345.

**[RELST 346 Seminar on 19th-Century Jewish Intellectual History (also Near Eastern Studies 347, Jewish Studies 346)]**  
Spring. 4 credits. Not offered 1998–99.]

**RELST 347 Tantric Traditions (also Asian Studies 347) @ #**  
Fall. 4 credits. D. Gold.  
For description, see ASIAN 347.

**[RELST 350 Introduction to Islamic Law (also Near Eastern Studies 351/651, History 372/652) @ #**  
Fall. 4 credits. Not offered 1998–99.  
D. Powers.]

**[RELST 351 The Religious Traditions of India (also Asian Studies 351) @ #**  
Spring. 4 credits. Not offered 1998–99.  
D. Gold.]

**[RELST 352 Art as Spectacle: The Italian Baroque (also History of Art 355) #**  
Fall. 4 credits. Not offered 1998–99.  
K. Barzman.]

**[RELST 354 Indian Buddhism (also Asian Studies 354) @ #**  
Fall. 4 credits. Not offered 1998–99.  
C. Minkowski.]

**RELST 355 Japanese Religions: A Study of Practice (also Asian Studies 355) @**  
Fall. 4 credits. J. M. Law.  
For description, see ASIAN 355.

**RELST 357 Chinese Buddhism (also Asian Studies 358)**  
Fall. 4 credits. D. Boucher.  
For description, see ASIAN 358.

**RELST 358 Literature and Religion: Western Mysticism (also Comparative Literature 358, Romance Studies 358)**  
Spring. 4 credits. C. M. Arroyo.  
For description, see COM L 358.

**RELST 359 Japanese Buddhism (also Asian Studies 359)**  
Spring. 4 credits. J. M. Law.  
For description, see ASIAN 359.

**RELST 360 Religion and Images across the Early Modern World (also History of Art 358)**  
Spring. 4 credits. K. Barzman.  
For description, see ART H 358.

**[RELST 362 The Culture of the Renaissance II (also Comparative Literature 362, English 325, History 364, History of Art 351, Music 390) #**  
Fall. 4 credits. Not offered 1998–99.  
W. J. Kennedy and C. V. Kaske.]

**[RELST 365 Medieval Culture, 400–1150 (also History 365) #**  
Fall. 4 credits. Prerequisite: RELST 263 or permission of instructor. Not offered 1998–99. J. J. John.]

**[RELST 368 Marriage and Sexuality in Medieval Europe (also History 368, Women's Studies 368) #**  
Spring. 4 credits. Not offered 1998-99.  
P. Hyams.]

**[RELST 393 Religion and Politics in the Middle East (also Near Eastern Studies 393)**  
Fall. 4 credits. Not offered 1998-99.]

**RELST 395 Classical Indian Philosophical Systems (also Asian Studies 395, Classics 395) @ #**  
Fall. 4 credits. Prerequisite: some background in philosophy or in classical Indian culture. C. Minkowski.  
For description, see ASIAN 395.

**RELST 410 Latin Philosophical Texts (also Philosophy 410) #**  
Spring. Variable credit. Prerequisite: knowledge of Latin and permission of instructor. S. MacDonald.  
For description, see PHIL 410.

**RELST 420 Readings in Biblical Hebrew Prose (also Near Eastern Studies 420, Jewish Studies 420) @ #**  
Spring. 4 credits. G. Rendsburg.  
For description, see NES 420.

**RELST 429 Readings in the New Testament (also Comparative Literature 429, Near Eastern Studies 429, English 429) #**  
Fall. 4 credits. J. Bishop.  
For description, see COM L 429.

**RELST 441 Mahayana Buddhism (also Asian Studies 441)**  
Spring. 4 credits. D. Boucher.  
For description, see ASIAN 441.

**RELST 442 Religion and Politics in American History (also History 442)**  
Fall. 4 credits. R. L. Moore.  
For description, see HIST 442.

**[RELST 443 Religion and Ritual in Chinese Society and Culture (also Anthropology 443) #**  
Fall. 4 credits. Not offered 1998-99.  
S. Sangren.]

**RELST 449 History and Methods of the Academic Study of Religion (also Asian Studies 449) #**  
Spring. 4 credits. Required of Religious Studies majors. J. M. Law.  
For description, see ASIAN 449.

**[RELST 451 Seminar in Islamic History 600-750 (also Near Eastern Studies 451/650, History 461/650) @ #**  
Spring. 4 credits. Not offered 1998-99.  
D. Powers.]

**[RELST 459 Women, Men and the Law in Muslim Court (also Near Eastern Studies 459/655, Women's Studies 458, History 457/657) # @**  
Fall. 4 credits. Not offered 1998-99.]

**RELST 473 Film and Spiritual Questions (also Theatre Arts 473)**  
Spring. 4 credits. Limited to 20 students. Offered alternate spring semesters.  
D. Fredericksen.  
For description, see THETR 473.

**RELST 490-491 Directed Study**  
490, fall; 491, spring. 2-4 credits each term. For majors in Religious Studies; permission of director required. Staff.

**RELST 495 Senior Honors Essay**  
Fall or spring. 8 credits. Required for honors in Religious Studies. Staff.

**RELST 531 Problems in Medieval Art and Architecture (also History of Art 531) #**  
Spring. 4 credits. R. G. Calkins.  
For description, see ART H 531.

Additional courses offered by cooperating departments may also be approved for the major in Religious Studies. For details see the program director, Jane Marie Law, 125 Rockefeller Hall or e-mail her at jml16@cornell.edu.

## Russian and East European Studies Major

J. Bomeman (Anthropology); G. J. Staller (Economics); S. Beck (Field and International Studies Program); I. Ezergailis, D. Bathrick (German Studies); V. Bunce, M. Evangelista, S. Tarrow (Government); P. Holquist, W. M. Pintner (History); U. Bronfenbrenner (emeritus, Human Development and Family Studies); P. Carden, G. Gibian, N. Pollak, S. Senderovich, G. Shapiro (Russian Literature); W. Browne, S. Paperno (Slavic linguistics)

The major in Russian and East European studies has the following requirements:

- 1) Proficiency in Russian or an East European language with one additional advanced (300-level) language or literature course, **OR** qualification in an East European language **and** qualification in another language useful for research in the area.\*
- 2) At least one course relating to Russia or Eastern Europe, at the 200 level or above, in four of the following five departments: Government, Economics, History, Russian Literature and Sociology. Appropriate courses offered in other departments may be substituted for one of the above courses with the consent of the major adviser.
- 3) At least three additional courses at the 300 level or above, all from one of the following three departments: Government, History (within the History Department courses may be at the 250 level or above), or Russian Literature. One of the three courses must be at the 400 level or above. The three courses must be approved by the major adviser in the department of concentration.

To apply for the major, students are directed to the Institute for European Studies (Slavic and East European Studies Program), 120 Uris Hall. Students should designate an adviser in the department where his or her work will be concentrated. Students are encouraged to study abroad and should discuss their plans with their advisers. For questions concerning the major or the Honors Program, students should consult with their major adviser or inquire at the Institute for European Studies.

## Honors Program in Russian and East European Studies

- I. Students entering the Russian and East European Studies Major Honors Program must have a cumulative average of at least 3.0, no grade below a B in courses connected with the major, and a cumulative average inside the major of at least 3.5. Students will form a special honors committee consisting of their major adviser and two other faculty members not necessarily from the Russian and East European area.
- II. Honors candidates must complete an honors thesis project during the senior year. The topic should be developed and approved in consultation with their major adviser. Part of the research should include sources in Russian or an Eastern European language.
- III. Students may earn a total of eight credits for the courses in the honors program and should register for the appropriate number in the department of their major adviser.
- IV. Ordinarily, in the first term of the senior year, students who meet the prerequisites will do independent research and reading in a particular area under supervision of their major adviser.
- V. In the second term of the senior year students will complete the honors project by a date set by the Slavic and East European Studies Program. Students should keep their committee members informed as their work progresses. Students will meet together with their whole honors committee to discuss the draft of the thesis or project and make recommendations for revision. When the project is completed, the committee will decide whether the project deserves honors, and, if so, after reviewing their academic record, will recommend students for a Bachelor of Arts *cum laude*, *magna cum laude*, or *summa cum laude*. The committee will also assign a grade for the honors research course.

## Courses

**COM L 311 Modern European Literature and Culture (also RUSS L 311 and FRLIT 315)**  
Spring. 4 credits.

**[COM L 337 Modern and Contemporary Theatre (also Theatre Arts 335)**  
Spring. 4 credits. Not offered 1998-99.]

**COM L 367 The Russian Novel (also Russian Literature 367) #**  
Fall. 4 credits.

**[COM L 381 Marxist Cultural Theory (also German Literature 381 and Government 372)**  
4 credits. Not offered 1998-99.]

**COM L 385 Reading Nabokov (also Russian Literature 385 and English 379)**  
Fall. 4 credits. Limited to 25.

**[COM L 389 Modern Literature in Poland, Czechoslovakia, Hungary, and Yugoslavia (also Russian Literature 389)**  
Fall. 4 credits. Not offered 1998-99.]

**COM L 425 The Jew's Body (also Comparative Literature 625, German Studies 422/622 and Jewish Studies 422/622)**

Spring. 4 credits. Readings will be primarily in English, though knowledge of another language (such as Hebrew and Yiddish or languages of the European Diaspora, such as German, Italian, French, Russian, Polish, etc.) could be helpful in certain contexts.

**[COM L 690 Marxism and Contemporary Theory]**  
4 credits. Not offered 1998-99.]

**[CZECH 131-132 Elementary Czech]**  
Not offered 1998-99.]

**[CZECH 133-134 Continuing Czech]**  
Not offered 1998-99.]

**[ECON 329 Eastern Europe Today: Economics, Government, Culture (also Government 326 and Russian Literature 329)]**  
Fall. 4 credits. Not offered 1998-99.]

**ECON 366 The Economies of Central Europe and of the Former Soviet Union: from Central Planning to Markets**  
Fall or spring. 4 credits.

**ECON 367 Comparative Economic Systems: East and West**  
Fall or spring. 4 credits.

**ECON 370 Socialist Economies in Transition**  
Fall or spring.

**ECON 381 Economics of Participation and Workers' Management**  
Fall or spring. 4 credits.

**ECON 382 The Practice and Implementation of Self-Management**  
Fall or spring. 4 credits.

**ECON 681 Economics of Participation and Self-Management**  
Fall or spring. 4 credits.

**ECON 682 Seminar on Economics of Participation and Labor-Managed Systems**  
Fall or spring. 4 credits.

**[GERST 376 Contemporary Soviet Latvian Literature]**  
Fall. 4 credits. Taught in Latvian. Not offered 1998-99.]

**[GERST 377 Baltic Literature]**  
Fall. 4 credits. Not offered 1998-99.]

**[GERST 381 Marxist Cultural Theory (also Comparative Literature 381 and Government 372)]**  
4 credits. Not offered 1998-99.]

**[GOVT 100.8 Power and Politics: The New Eastern Europe]**  
4 credits. Not offered 1998-99.]

**GOVT 231 Introduction to Comparative Government and Politics**  
Spring. 4 credits.

**[GOVT 325 Government and Politics of Eastern Europe]**  
4 credits. Not offered 1998-99.]

**[GOVT 326 Eastern Europe Today: Economics, Government, Culture]**  
4 credits. Not offered 1998-99.]

**[GOVT 330 The Soviet Union: Politics, Economics, and Culture]**  
Not offered 1998-99.]

**[GOVT 333 Government and Politics of the Former Soviet Union]**  
Fall. 4 credits. Not offered 1998-99.]

**[GOVT 337 Marxism, Communism and Revolution]**  
4 credits. Not offered 1998-99.]

**GOVT 341 Modern European Society and Politics (also SOC 341)**  
Fall. 4 credits.

**GOVT 342 The New Europe**  
Spring. 4 credits.

**GOVT 350 Comparative Revolutions**  
Spring. 4 credits.

**[GOVT 359 Soviet Foreign Policy]**  
4 credits. Not offered 1998-99.]

**[GOVT 376 Rethinking Marx]**  
4 credits. Not offered 1998-99.]

**GOVT 394 Comparative Foreign Policy**  
Spring. 4 credits.

**[GOVT 397 The United States and Russia]**  
4 credits. Not offered 1998-99.]

**[GOVT 399 International Relations in the Former Soviet Union]**  
Fall. 4 credits. Not offered 1998-99.]

**[GOVT 400.3 Post-Communism and Ethnic Mobilization]**  
4 credits. Not offered 1998-99.]

**[GOVT 446 Comparative Communism]**  
4 credits. Not offered 1998-99.]

**[GOVT 481 Foreign Policy of the U.S.S.R.]**  
4 credits. Not offered 1998-99.]

**[GOVT 486 International Security: Soviet Security Policy]**  
4 credits. Not offered 1998-99.]

**GOVT 491 Conflict, Cooperation, and Norm: Ethnical Issues in International Affairs**  
Fall. 4 credits.

**[GOVT 637 Peasantry, State, and Revolutionary Socialism]**  
4 credits. Not offered 1998-99.]

**[GOVT 639 Politics of the Soviet Union]**  
Fall. 4 credits. Not offered 1998-99.]

**[GOVT 642 The Future of European Security]**  
4 credits. Not offered 1998-99.]

**[GOVT 657 Comparative Democratization]**  
4 credits. Not offered 1998-99.]

**GOVT 660 Social Movements, Collective Action, and Reform**  
Fall. 4 credits.

**[GOVT 669 Modern Social Theory I]**  
4 credits. Not offered 1998-99.]

**GOVT 670 Modern Social Theory II**  
Spring. 4 credits.

**HIST 218 The Russian Military Effort and Foreign Policy #**  
Fall. 3 credits.

**[HIST 242 Europe Since 1789 #]**  
4 credits. Not offered 1998-99.]

**HIST 252 Russian History to 1800 #**  
Fall. 4 credits.

**HIST 253 Russian History Since 1800 #**  
Spring. 4 credits.

**HIST 290 Twentieth-Century Russia and the Soviet Union**  
Spring. 4 credits.

**[HIST 352 The End of the Austro-Hungarian Monarchy, 1848-1919]**  
4 credits. Not offered 1998-99.]

**HIST 383 Europe 1900-1945**  
Fall. 4 credits.

**[HIST 384 Europe, 1945-1968]**  
Fall. 4 credits. Not offered 1998-99.]

**HIST 385 Europe in the 20th Century: 1968-1990**  
Spring. 4 credits.

**[HIST 415 The United States and Russia, 1780-1914 #]**  
4 credits. Not offered 1998-99.]

**[HIST 464 Russian Social History #]**  
Spring. 4 credits. Not offered 1998-99.]

**[HIST 485 The Historical Origin of the Post-Soviet Successor States]**  
Spring. 4 credits. Not offered 1998-99.]

**HIST 490 Social and Cultural History of the Russian Intelligentsia**  
Spring. 4 credits.

**HIST 677 Seminar in Russian History**  
Fall. 4 credits.

**HIST 678 Seminar in European Political History**  
Spring. 4 credits.

**[HUNGR 131-132 Elementary Hungarian]**  
3 credits. Not offered 1998-99.]

**[ILRCB 331 Comparative Industrial Relations Systems: Non-Western Countries]**  
3 credits. Not offered 1998-99.]

**[ILRCB 606 Theories of Industrial Relations Systems]**  
3 credits. Not offered 1998-99.]

**NBA 583 Market Transitions in Eastern Europe**  
Fall. 3 credits.

**POLSH 131-132 Elementary Polish**  
131, fall; 132, spring. 3 credits each term.

**[POLSH 133-134 Continuing Polish]**  
133, fall; 134, spring. 3 credits each term.]

**[ROMAN 131-132 Elementary Romanian]**  
131, fall; 134, spring. 3 credits. Not offered 1998-99.]

**[ROMAN 133-134 Continuing Romanian]**  
133, fall; 134, spring. 3 credits. Not offered 1998-99.]

**RUSSA 103-104 Conversation Practice**  
103, fall; 104, spring. 2 credits each term.

**RUSSL 103 Freshman Writing Seminar: Classics of Russian Thought and Literature**  
Fall or spring. 3 credits.

**RUSSL 104 Freshman Writing Seminar: Nineteenth-Century Russian Literary Masterpieces**  
Fall or spring. 3 credits.

- RUSSL 105 Freshman Writing Seminar: Twentieth-Century Russian Literary Masterpieces**  
Fall. 3 credits.
- [RUSSL 108 Freshman Writing Seminar]**  
Fall or spring. 3 credits. Not offered 1998-99.]
- RUSSL 109 Russian Science Fiction**  
Spring. 3 credits.
- RUSSA 121-122 Elementary Russian**  
121, fall or summer; 122, spring or summer. 4 credits each term.
- RUSSA 123 Continuing Russian**  
Fall. 4 credits.
- RUSSL 201-202 Readings in Russian Literature #**  
201, fall; 202, spring. G. Shapiro. 3 credits each term.
- RUSSA 203-204 Intermediate Composition and Conversation**  
203, fall, spring, or summer; 204, spring. 3 credits each term.
- RUSSA 205-206 Reading Russian Press**  
205, fall; 206, spring. 2 credits each term.
- RUSSA 207-208 Russian Phonetics for Beginners**  
207, fall; 208, spring. 2 credits.
- RUSSL 207 Themes from Russian Culture I #**  
Not offered 1998-99.]
- [RUSSL 208 Themes from Russian Culture II]**  
Spring. 3 credits. Not offered 1998-99.]
- [RUSSA 301-302 Advanced Russian Grammar and Reading]**
- RUSSA 303-304 Advanced Composition and Conversation**  
303, fall; 304, spring. 4 credits each term.
- RUSSA 305-306 Directed Individual Study**  
305, fall; 306, spring. 2 credits each term.
- RUSSA 309-310 Advanced Reading**  
309, fall; 310, spring. 4 credits.
- [RUSSL 331 Introduction to Russian Poetry #]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 332 Russian Drama and Theatre (also Theatre Arts 332)]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 333 Twentieth-Century Poetry]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 334 The Russian Short Story #]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 335 Gogol #]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 350 Education and the Western Literary Tradition (also Comparative Literature 350 and College Scholar 350) #]**  
Spring. 4 credits. Not offered 1998-99.]
- RUSSL 367 The Russian Novel #**  
Fall. 4 credits.
- RUSSL 368 Russian Literature From 1917 to the Present**  
Fall. 4 credits.
- [RUSSL 369 Dostoevsky #]**  
4 credits. Not offered 1998-99.]
- [RUSSL 371 Literature of the Third Wave]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 373 Chekhov in the Context of Contemporary European Literature and Art (also Comparative Literature 395) #]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 375 Literature of the Soviet Period 1917-1945]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 376 Literature of the Soviet Period 1945-1985]**  
Spring. 4 credits. Not offered 1998-99.]
- RUSSL 379 The Russian Connection #**  
Spring. 4 credits.
- [RUSSL 380 Soviet Dissident Literature]**  
Fall. 4 credits. Not offered 1998-99.]
- RUSSL 385 Reading Nabokov (also Compl 385 and English 379)**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 388 Ideas and Form in Novels of Social Inquiry (also Comparative Literature 388)]**  
4 credits. Not offered 1998-99.]
- [RUSSL 389 Contemporary Literature in Central and East Europe (also Comparative Literature 389)]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 390 The Power of Nationalism: Expressions of National Feelings in Politics, Literature, History, and the Arts (also Comparative Literature 390)]**  
Fall. 4 credits. Not offered 1998-99.]
- RUSSL 393 Honors Essay Tutorial**  
Fall and spring. 8 credits. Not offered 1998-99.
- Must be taken in two consecutive semesters in the senior year. Credit for the first semester will be awarded upon completion of the second semester. For information, please see the Director of Undergraduate Studies.]
- [RUSSL 400 Reading the Great Tradition #]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSA 401-402 History of the Russian Language]**  
401, fall; 402, spring. 4 credits each term. Not offered 1998-99.]
- RUSSA 403-[404] Linguistic Structure of Russian**  
403, fall; [404, spring]. 4 credits. 404 Not offered 1998-99.
- [RUSSA 407-408 Russian Phonetics]**  
407, fall; 408, spring. Not offered 1998-99.]
- RUSSA 409 Teaching Russian as a Foreign Language**  
Fall or spring. 1 credit.
- [RUSSL 409 Russian Stylistics]**  
Fall. 4 credits. Not offered 1998-99.]
- RUSSA 413-414 Advanced Conversation and Stylistics**  
413, fall; 414, spring. 2 credits each term.
- [RUSSL 415 Postsymbolist Russian Poetry]**  
4 credits. Not offered 1998-99.]
- RUSSL 430 Practice in Translation**  
Spring. 4 credits.
- [RUSSL 431 Contemporary Russian Prose]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 432 Pushkin #]**  
Spring. 4 credits. Not offered 1998-99.]
- RUSSL 445 Batiushkov and Pasternak**  
Fall. 4 credits.
- RUSSL 460 Short Works of Tolstoy and Dostoevsky**  
Spring. 4 credits.
- RUSSL 491 Reading Course: Russian Literature in the Original Language**  
Fall or spring. 1 credit.
- RUSSL 492 Supervised Reading in Russian Literature**  
Fall or spring. 1-4 credits each term.
- [RUSSL 498 Russian Symbolism]**  
4 credits. Not offered 1998-99.]
- [RUSSL 499 Research Modernism]**  
4 credits. Not offered 1998-99.]
- [RUSSL 600 Proseminar: Research Methodology in Russian Literature]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSA 601 Old Church Slavonic]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSA 602 Old Russian Texts]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 603 Graduate Seminar: Neglected Masterpieces of Short Russian Prose]**  
Spring. 4 credits. Not offered 1998-99.]
- RUSSL 611 Supervised Reading and Research**  
Fall or spring. 2-4 credits.
- [RUSSL 617 Russian Stylistics I]**  
Not offered 1998-99.]
- [RUSSL 618 Russian Stylistics II]**  
Not offered 1998-99.]
- [RUSSL 619 Seventeenth-Century Russian Literature]**  
Fall. 4 credits. Not offered 1998-99.]
- [RUSSL 620 Twentieth-Century Russian Poetry]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 621 Old Russian Literature]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 622 Eighteenth-Century Russian Literature]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 623 Early Nineteenth-Century Literature]**  
Not offered 1998-99.]
- RUSSL 624 Russian Romanticism**  
Spring. 4 credits.
- [RUSSL 625 Russian Realism]**  
Fall. 4 credits. Also open to advanced undergraduates with permission of instructor. Not offered 1998-99.]
- [RUSSL 626 The Tradition of Russian Poetry]**  
Spring. 4 credits. Not offered 1998-99.]
- [RUSSL 630 Gogol]**  
4 credits. Taught in Russian. Not offered 1998-99.]



**[RUSSL 632 Russian Drama and Literature (also Theatre Arts 622)]**  
Fall. 4 credits. Not offered 1998–99.]

**RUSSA 633–634 Russian for Russian Specialists**  
633, fall; 634, spring. 4 credits each term.

**[RUSSL 635 Modern Russian Literary Criticism]**  
Spring. 4 credits. Not offered 1998–99.]

**RUSSL 641 Bakhtin**  
Spring. 4 credits.

**[RUSSL 650 Russian Intellectual History]**  
4 credits. Not offered 1998–99.]

**RUSSA 651–652 Comparative Slavic Linguistics**  
651, fall; 652, spring. 4 credits each term.

**[RUSSL 669 Seminar: Dostoevsky]**  
Fall. 4 credits. Not offered 1998–99.]

**RUSSL 671 Seminar in Russian Literature**  
Spring. 4 credits.

**[RUSSL 672 Seminar in Twentieth-Century Russian Literature]**  
Fall. 4 credits. Not offered 1998–99.]

**[RUSSL 673 The Russian Nabokov]**  
Fall. 4 credits. Not offered 1998–99. Also open to advanced undergraduates.]

**[RUSSL 674 Solzhenitsyn and Literature of the Gulag]**  
Fall. 4 credits. Not offered 1998–99.]

**RUSSL 675 Russian Literature, 1917–1945**  
Fall. 4 credits. Not offered 1998–99.]

**[RUSSL 676 Russian Literature, 1945–Present]**  
Spring. 4 credits. Not offered 1998–99.]

**[RUSSL 698 Russian Symbolism]**  
4 credits. Not offered 1998–99.]

**[RUSSL 699 Russian Modernism]**  
4 credits. Not offered 1998–99.]

**[SEBCR 131–132 Elementary Serbo-Croatian]**  
131, fall; 132, spring. 3 credits each term. Not offered 1998–99.]

**SEBCR 133–134 Continuing Serbo-Croatian**  
133, fall; 134, spring. 3 credits each term.

**SOC 230 Knowledge and Power**  
3 credits.

**[SOC 360 State and Society in Comparative Perspective]**  
3 credits. Not offered 1998–99.]

**[SOC 365 Comparative Perspectives on Socialist Societies and Economics]**  
4 credits. Not offered 1998–99.]

**[SOC 366 Transitions From State Socialism]**  
Spring. 4 credits. Not offered 1998–99.]

**SOC 510 Comparative Societal Analysis**  
Fall. 4 credits.

**SOC 583 Transitions to Market Economies in Eastern Europe (also Management NBA 583)**  
Spring. 4 credits.

**[THETR 322 Russian Drama and Theatre (also Russian Literature 332)]**  
4 credits. Not offered 1998–99.]

**[THETR 335 Modern and Contemporary Theatre (also Comparative Literature 337)]**  
Spring. 4 credits. Not offered 1998–99.]

**THETR 378 Russian Films of the 1920s and French Films of the 1960s**  
Spring. 4 credits.

**[THETR 662 Russian Drama and Theatre (also Russian Literature 632)]**  
4 credits. Not offered 1998–99.]

**[UKRAN 131–132 Elementary Ukrainian]**  
131, fall; 132, spring. 3 credits each term. Not offered 1998–99.]

## Science of Earth Systems

R. Allmendinger, W. Allmon, W. Bassett, J. Bird, L. Brown, L. Cathles, J. Cisne, L. Derry, C. Greene, B. Isacks, T. Jordan, S. Kay, R. Kay, W. Travers, D. Turcotte, W. White (Geological Sciences); P. Baveye, S. Colluci, K. Cook, W. Knapp, S. Riha, D. Wilks, M. Wysocki (Soil, Crop and Atmospheric Sciences); W. Brutsaert (Civil and Environmental Engineering); T. Dawson, L. Hedin, R. Howarth (Ecology and Systematics); P. Gierasch (Astronomy); M. Kelley (Electrical Engineering); J.-Y. Parlange (Agricultural and Biological Engineering); J. Yavitt (Natural Resources).

The Science of Earth Systems (SES) is the study of the interactions between the atmosphere, oceans, biosphere, and solid Earth; these dynamic interactions control the global environment. The interdisciplinary approach of SES incorporates major components of geology, ocean and atmospheric sciences, terrestrial hydrology, biogeochemistry, and ecology into an integrated study of Earth as a complex system. Earth system science presents one of the outstanding intellectual challenges in modern science and is the primary foundation for the future management of our home planet.

## The Major

The major in Science of Earth Systems emphasizes a rigorous, objective study of the Earth and its systems with broad preparation in basic sciences and mathematics, followed by the choice of an area of concentration for study in greater depth. The Science of Earth Systems program seeks to train students in a strong set of fundamental skills that will allow them to approach with quantitative rigor a wide range of questions about the Earth and its environment, and to adapt those skills rapidly to new areas of inquiry as they arise. The major in Science of Earth Systems is by nature interdisciplinary, and involves faculty from the College of Arts and Sciences, the College of Engineering, and the College of Agriculture and Life Sciences. In the College of Arts and Sciences the program is administered by the Department of Geological Sciences in collaboration with the Department of Astronomy and the Section of Ecology and Systematics in the Division of Biological Sciences.

The SES curriculum begins with a series of courses designed to provide preparation in fundamental science and mathematics necessary for a rigorous study of Earth Systems. This preparation is followed by a series of five core courses providing breadth and integration. An additional set of three intermediate to advanced courses are selected

to provide depth and a degree of specialization.

Students in the College of Arts and Sciences choosing to pursue the Science of Earth Systems major are required to take the following courses: SES 101 or 102 (Colloquium), PHYS 207–208, CHEM 207–208, BIOSCI 101/103–102/104 (or 109–110), and MATH 111–112 (or 121–122, or 191–192). Two additional 3–4 credit hour courses in mathematics, physics, chemistry, or biology are required; these additional courses must require one or more of the basic courses listed above as a prerequisite. Examples include MATH 221, CHEM 257, BIOMI 290, GEOL 201 may substitute for one of the two additional required courses. Mathematics at the level of MATH 221 or 293 is strongly recommended for all SES students, and those choosing areas of concentration in Atmospheric Sciences, Environmental Geophysics, or Hydrology should take MATH 222 or 294.

The four required SES core courses include the following:

SES 301 (ASTRON 331, SCAS 331) Climate Dynamics

SES 302 (GEOL 302, SCAS 332) Evolution of the Earth System

SES 321 (GEOL 321, NATRES 321) Biogeochemistry

SES 402 (ABEN 385) Mechanics in the Earth and Environmental Sciences

These courses are described in the section entitled "Interdisciplinary Centers, Programs, and Studies" at the beginning of the catalog. The fifth required core course is BIO S 261, Ecology and the Environment. Nine additional credit hours selected from 300- and 400-level courses approved by the SES Committee are required. These courses will ordinarily be organized around one of the SES areas of specialization. The areas of specialization currently include the following:

**Climate Dynamics**, the study of physical and chemical processes producing Earth's weather and climate;

**Ocean Sciences**, the study of the biological, chemical, and physical processes at work in the ocean;

**Hydrological Sciences**, the study of the interactions of rock, water, snow, and ice on Earth's land surfaces;

**Biogeochemistry**, study of element cycling near Earth's surface and how organisms both mediate and benefit from these fluxes;

**Environmental Geology and Geophysics**, remote sensing, field and laboratory measurements of Earth's surface and subsurface applied to the study of the environment, global change, and natural hazards;

**Earth in Space**, Earth's ionosphere and exosphere, solar-terrestrial interactions, and earth as a planet.

Further information and applications contact B. Isacks, 255–2307, bli1@cornell.edu or R. Kay, 255–3461, rwk6@cornell.edu. Also see the SES website at [http://www.geo.cornell.edu/geology/ses\\_arts.html](http://www.geo.cornell.edu/geology/ses_arts.html) for up-to-date information. Administrative offices are located at 2120 Snee Hall.

## Society for the Humanities

**Timothy Murray**, Acting Director

**Fellows for 1998-99**

**Anne Adams** (Cornell University)

**Lisa Cartwright** (University of Rochester)

**Brett deBary** (Cornell University)

**Milad Doueih** (Independent Scholar)

**Gail Fine** (Cornell University)

**Brian Goldfarb** (University of Rochester)

**Eleanor Kaufman** (Cornell University)

**Ranjana Khanna** (University of Washington)

**Arthur Kroker** (Concordia University)

**David Moore** (Cornell University)

**Margaret Morse** (University of California, Santa Cruz)

**Trevor Pinch** (Cornell University)

**Annette Richards** (Cornell University)

**Marie-Laure Ryan** (Independent Scholar)

**Geoffrey Waite** (Cornell University)

**Christopher Williams** (University of Nevada, Reno)

**Reginald Woolery** (Digital Artist)

The Society annually awards fellowships for research in the humanities. The Fellows offer, in line with their research, informal seminars intended to be exploratory or interdisciplinary. These seminars are open to graduate students, suitably qualified undergraduates, and interested auditors. Students who want credit for a seminar should formally register in their own college. Persons other than those officially enrolled may attend as visitors with permission of the Fellow. The theme for 1998-99 is **The Virtual: Old and New**.

### **S HUM 402 Technology and (Dis)Ability**

Fall. 4 credits. Limited to 15 students.  
Permission of instructor. L. Cartwright and B. Goldfarb.

This seminar will examine legal, cultural, and historical ways of defining and understanding disability, and the impact of digital and other forms of assistive technologies on the lived experience and cultural understanding of people with disabilities. We will approach this interdisciplinary subject through theoretical, technical, and popular writings from the fields of education, health, law and ethics, advocacy, science and technology studies, and cultural studies. Part of the course will be devoted to online research and development of a Web-based resource on the topic of technology and disability. A few of the topics we will consider include assistive technologies, cochlear implants, prosthetics, and facilitated communication.

### **S HUM 403 The Afro-Europeans (also German Studies 403)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. A. Adams.

As Afro-Germans, Afro-Dutch, "Afro-Saxons," Black British, Black Frenchmen, are becoming more self-aware and vocal, they are extending the concepts of "African Diaspora" and "European" simultaneously. While in some places Black communities of several generations' duration are recognized as part of the social, economic, and political fabric, other places have difficulty acknowledging that their populations are, and have long been, multi-

racial. Using sources including mainstream and Black-community media, popular culture materials, and texts from social history, this course will explore the complexities of Black identity in the "European" communities.

### **S HUM 404 Early Modern Paradise (also Comparative Literature 424 and French Literature 405)**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. M. Doueih.

This seminar will focus on the central role played by "Paradise" in a number of important debates in the Republic of Letters in the Early Modern Period. Texts will include readings in philosophy (Bayle, Spinoza, Leibniz, Arnauld), history (Huet), literature (Loredano), utopian thought (Bourignon, de Foigny), and spirituality (Binet, de Sales, Alacoque).

### **S HUM 405 Conflicting Appearances (also Philosophy 415)**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. G. Fine.

Appearances often appear to conflict: the wind appears cold to me, but not to you; honey appears sweet to some people, but not to others; abortion seems right to some people but not to others. What if anything should we infer? Some philosophers favor a relativist solution, according to which all appearances are correct (to those who have them) without contradiction. Others favor a sceptical solution: we can't, or don't, know which if any of the appearances are correct. Yet others argue that both appearances are false: the wind, for example, is neither warm nor cold: either properties like coldness and warmth don't exist at all or, if they do, they are subjective features of perceivers rather than objective features of the wind. We will focus on the solutions to the problem of conflicting appearances offered by various ancient philosophers such as Heraclitus, Protagoras and Democritus; Plato and Aristotle; and the Hellenistic philosophers (Epicureans, Stoics, and Sceptics). Insofar as time permits, we will also compare their solutions with more recent ones. For example, how does Protagoras' alleged relativism compare with contemporary versions of relativism? How does Epicurus' claim that all perceptions are true compare with Berkeley's seemingly similar claims?

### **S HUM 406 History and Memory: Virtual Nations, Artificial Groups, and the Historical Event (also Comparative Literature 400, Near Eastern Studies 490)**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. R. Khanna.

This course addresses how groups respond to traumatic events. While trauma is usually conceptualized in terms of an event, we will consider the prolonged trauma of colonialism. We will begin with some psychoanalytic and historiographical texts that introduce us to the functioning of memory, the process of individual mourning, responses to war, and the relationship between the individual and the group. Having come to some theoretical understanding of how the traumatic event has individual and group consequences and therefore also how memory operates in response to historical events, we will study cultural and historical texts relating to Algeria including paintings by Delacroix, Picasso, and Baya; early French colonial documents on assimilation and narratives of torture by Algerian women including legal testimony and

mock trials; and films by Pontecorvo, Djébar, Dehane.

### **S HUM 408 Body Fictions**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. M. Morse.

This seminar addresses the incorporation and representation of collective and virtual bodies, drawing primarily on the domains of film and cyberculture, but also on religion, law, politics, literature, beauty culture, and sport. Gigantic bodies, crowds, masses, sentient networks, and artificial life are instances of collective embodiment studied in a wide variety of sources. The body conceived as a bounded and coherent entity with mass has socio-political implications that are set in question from the start.

### **S HUM 409 From the Phonograph to Techno (also Science & Technology Studies 409)**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. T. Pinch.

In this seminar, we will treat music and sound and the ways they are produced and consumed as socio-cultural phenomena. We will be concerned to investigate specifically the way that music and sounds are related to technology and how such technologies and sounds have been shaped by and have shaped the wider society and culture of which they are a part. We will look at the history of sound technologies like the phonograph, the electronic music synthesizer, samplers, and the Sony walkman. Our perspective will be drawn from social and cultural studies of science and technology. Students will be encouraged to carry out a small original research project on their own favorite sound technology.

### **S HUM 410 Music and Monstrous Imaginings (also Music 410)**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. A. Richards.

This seminar explores the limits of the imaginary in eighteenth- and nineteenth-century culture, from theories of fantasy, unreason, and "monstrous imagining" to freak shows, virtuosi, and illusionists. Focusing on visual, literary, and musical phantasmagoria, we will investigate the performance of the uncanny (Paganini and devilish technical feats, Mesmer and the glass harmonica), the gendered imagination and artistic creation (pregnancy and invention), technologies of death and its representation (the guillotine and wax museum, magic lantern shows and automata). Novels by Radcliffe, Lewis, Shelley; instrumental music by C. P. E. Bach, Beethoven, Mendelssohn, Berlioz; opera by Mozart, Weber, Meyerbeer; critical texts from Addison and Steele to Freud and Foucault.

### **S HUM 412 Spinoza and Virtual Ideology (also German Studies 409)**

Fall. 4 credits. Limited to 15 students.

Permission of instructor. G. Waite.

"Every philosopher has two philosophies: his own and Spinoza's." This seminar takes up the challenge of Bergson's remark, testing it critically in the context of contemporary concepts of "virtual reality." In Jameson's words, "The new world system, the ultimate third stage of capitalism is for us the absent totality, Spinoza's God or Nature, the ultimate (indeed perhaps the only) referent, the true ground of Being in our time." At the same time, however, in Lacan's formulation, God is thus not merely not dead, not merely Capitalism Triumphant, but (the) unconscious

and therefore also ideology. Exploring the possibility of a premodern critique of postmodernity, we will focus on Spinoza's *Theologico-Political Treatise*, along with selections from his writings related more explicitly to the distinction between "the virtual," "the actual," "reality," and "the real." We will read short texts by Spinoza's contemporaries as well as more current critics and appropriators of Spinoza such as: Albiac, Althusser, Balibar, Deleuze, Curley, Giancotti, Irigaray, Karatani, Lacan, Macherey, Moreau, Matheron, Negri, Norris, Rosen, Scruton, Strauss, Tosel, Wolfson, Yovel, Zizek. In general, we will compare the neo-communist Althusserian tradition of Spinozists with the Straussian tradition of "Platonic political rationalism." Critical anthologies used are *The Cambridge Companion to Spinoza* (ed. Garrett) and *The New Spinoza* (ed. Montag and Stolze).

**S HUM 415 Virtual Orientalisms and the Representation of "Japan" (also Asian Studies 415)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. B. deBary.

The seminar will examine the role of the virtual technologies in contemporary representations of Japan, as well as the proliferation of late-twentieth-century representations of Japan as a site of utopic or dystopic virtuality. As a society which did not experience the direct exercise of Western imperialist authority, Japan since the late nineteenth century has appeared in the Orientalist imagination as a hermetic integrity provoking both fascination and anxiety. Ambiguously represented as a culture of both the "chrysanthemum" (the hyper-aesthetic) and the "sword" (the hyper-phallic), with the advent of what some have called "techno-orientalism," Japan has increasingly become a preoccupation of technological and futurological imagination. Interpreting Orientalism as a broadly based, though not monolithic, ensemble of representational and regulatory practices, this course will examine both resonances and dissonances between influential contemporary scholarly writings on Japan and widely circulating representations in "popular" culture, especially those produced in film, science fiction, video games, and fanzines.

**S HUM 416 Scepticism: Old and New (also Philosophy 415)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. G. Fine.

Ancient and modern scepticism are often thought to be quite different from one another. Hegel, for example, argues that ancient scepticism is more radical and profound than Cartesian and post-Cartesian scepticism. Many contemporary philosophers, on the other hand, think that modern scepticism is more radical than ancient scepticism. Descartes, by contrast, denies that 'his' scepticism is novel at all. In his view, it is 'reheated cabbage', boringly familiar. Who is right? We will focus on ancient scepticism, especially as it is described by Sextus Empiricus. But we will also compare his account of scepticism with the scepticism of Descartes. Insofar as time permits, we will also look at some of the following: Montaigne, Gassendi, and Hume; and more recent philosophers such as G. E. Moore and Barry Stroud.

**S HUM 417 Gilles Deleuze and the Philosophy of the Virtual (also Comparative Literature 408 and French Literature 415)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. E. Kaufman.

This course will trace the concept of the virtual in the writings of the French philosopher Gilles Deleuze. We will also trace this line of thought by reading relevant work from some of Deleuze's philosophical predecessors. This will be done through selective pairing of Deleuze's work with that of other thinkers. So, for example, we will read Deleuze's *Logic of Sense* alongside Plato's *Republic*, Deleuze's *Spinoza: Expressionism in Philosophy* alongside Spinoza's *Ethics*, and Deleuze's *Bergsonism* alongside Bergson's *Matter and Memory*. In addition, we will give particular attention to Deleuze's study of Leibniz, *The Fold: Leibniz and the Baroque*, and to selected essays from some of Deleuze's later writings.

**S HUM 418 Digital Futures**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. A. Kroker.

The seminar will examine key contributors in contemporary theory and "new media" art to understanding the digital future. At a time when major technological changes seemingly numb perception and overwhelm traditional ethical perspectives, the seminar will focus on major issues in theory and art as ways of framing discussion of the new universe of clonal engineering, emergent senses, new codes, Web culture, and artificial intelligence. Beginning with leading European theorists, including Virilio, Baudrillard, and Deleuze and Guattari, the seminar will relate their insights on virtuality, old and new, to the diverse range of perspectives that make up technology and the American mind. The discussion of contemporary digital theory will be guided by the question of the "interface" of technology and culture. On the basis of this reflection, the seminar will then explore a range of contemporary new media artists in the areas of digital music, multimedia performance, virtual film and video, telepresence, artificial intelligence, and robotic performance art.

**S HUM 419 Native and Nation (also English 406)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. D. Moore.

Shaped largely by Native American writers and critics, the seminar traces a literary politics of American identities, played out in canonical and non-canonical texts of the past two centuries. A discourse of "virtual reality," derived from on-line Indian gaming controversies, offers a useful frame to re-examine American literary history for representations by and of American Indians, African Americans, and successive waves of ethnic immigrants. We look at historical, ideological, and epistemological disjunctions in the nineteenth century (Apess, Whitman, Douglass, Thoreau, Emerson, Winemucca, and others) and in the twentieth century (McNickle, Faulkner, Kerouac, Morrison, Vizenor, Silko, Young Bear, and others), with extensive critical studies.

**S HUM 420 Improvisation, Music, History (also Music 411)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. A. Richards.

Improvisation is the most immediate and evanescent form of musical utterance. While normative in many cultures, improvisation is

largely figured as "virtual" within traditional discourses of European Art Music. This seminar will question the marginalization of improvisation in music histories, investigating changing notions of musical competence and genius, and the ways in which musicians and critics from the 18th to the 20th centuries have addressed the problems of comprehensibility and formal coherence raised by extemporized performance. We will study music (texts and performances) ranging from J. S. Bach to John Coltrane, and read theory and criticism of the period alongside contemporary historiography, dance and performance theory (Adorno, Dalhaus, Turner, Schechner, Franko.)

**S HUM 421 The Poetics of Virtuality (also English 409)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. M. Ryan.

The electronic technology of virtual reality has been defined as an "immersive, interactive experience generated by a computer." In this seminar, we will examine the potential of various media to create experiences of immersion and interactivity, with special emphasis on print literature and electronic texts. The two types of experience will be related to two philosophical interpretations of the concept of virtuality: the virtual as fake, and the virtual as matrix of possibilities. Materials to be studied will include print fiction, electronic texts (including hypertext fiction), computer games, descriptions of VR projects, and theoretical texts about electronic culture. The course will encourage students to make maximal use of electronic resources.

**S HUM 422 Imagination (also Philosophy 442)**

Spring. 4 credits. Limited to 15 students.  
Permission of instructor. C. Williams.

We will philosophically explore the imagination, with particular attention to the notion of a *point of view*: what is involved in occupying a point of view, the extent to which we can imaginatively transcend our own (and the ways in which there may be limits to our success), and the role of imaginative exercise in aesthetic and moral experience. Our picture of imagination will stress the "virtual" movement of the imager, and partly contrasts with the traditional identification of imagining with image-making.

**S HUM 423 The Role of Women in Muslim Societies: Past, Present, and Future (also Asian Studies 422 and Near Eastern Studies 457)**

Spring. 4 credits. Limited to 15 students.  
J. Armijo-Hussein.

**S HUM 429 Race in Biomedical Constructions of Women (also Women's Studies 489)**

Fall. 4 credits. Limited to 15 students.  
M. Murphy.

**S HUM 430 Islam in China and Southeast Asia (also Asian Studies 422 and Near Eastern Studies 453)**

Fall. 4 credits. Limited to 15 students.  
J. Armijo-Hussein.

**S HUM 444 Metaphysics and Epistemology (also Philosophy 460)**

Fall. 4 credits. Limited to 15 students.  
K. Balog.

**S HUM 450 Keep Your Hands Off The Park**

Fall. 4 credits. Limited to 15 students.  
Permission of instructor. R. Woolery.  
"Hands" is a participatory seminar which will foreground how virtuality intersects with the privatization of public space. Central will be a mapping of "democratic spheres" between real and virtual worlds. Is it possible to level the playing field between those with power and privilege and those without? How might the community activist negotiate across geography, economics, and difference? Readings from models in game design, art practice, urban development policy, and cultural theory.

**S HUM 489 The Body in American Feminism (also Women's Studies 480)**

Spring. 4 credits. Limited to 15 students.  
M. Murphy.

**S HUM 495 Philosophy of Mind (also Philosophy 462)**

Spring. 4 credits. Limited to 15 students.  
K. Balog.

**South Asia Program**

S. Feldman, director; A. Basu, K. Basu, D. Bor, C. Fairbanks, S. Feldman, J. Gair, D. Gold, D. Henderson, R. Herring, D. Holmberg, J. Jasanoff, S. Jasanoff, M. Katzenstein, V. Kayastha, K. A. R. Kennedy, S. Kuruvilla, B. Lust, B. G. MacDougall, M. Majumdar, K. March, C. Minkowski, S. Mohanty, V. Munasinghe, A. Nussbaum, S. Oja, P. Olpadwala, B. Perlus, T. Poleman, S. Subramanian, D. Sudan, N. Uphoff, M. Walter

The South Asia Program coordinates research, teaching, and special campus events relating to Bangladesh, India, Pakistan, Nepal, and Sri Lanka. The program faculty includes members from a variety of disciplines, including agricultural economics, agricultural engineering, anthropology, architecture, art, city and regional planning, communication, comparative religion, ecology and systematics, economics, English, government, history, history of art, human ecology, industrial and labor relations, international agriculture, linguistics, literature, rural sociology, and science, technology, and society. Undergraduates with a special interest in the region may major in Asian studies with a South Asia concentration, or complete a South Asia concentration with any other major. Graduate students may pursue the M.A. degree in Asian Studies with a concentration in South Asia. Languages offered are Bengali, Hindi, Nepali, Sinhala, Urdu, Sanskrit, and Pali. Foreign Language Area Studies Fellowships are available to Cornell graduate students who are U.S. citizens. Cornell is a class A member of the American Institute of Indian Studies (AIIS), and undergraduates as well as graduate students are eligible for AIIS intensive language program fellowships in India. For courses available in South Asian studies and details on the major, see the Department of Asian Studies listing in this volume.

Students who want further information on courses and research opportunities should direct questions to the program office, 170 Uris Hall.

**Southeast Asia Program**

T. Chaloeintarara, director; B. R. Anderson, W. B. Bailey, A. C. Cohn, P. Gellert, M. F. Hatch, A. T. Kirsch, J. M. Krier, K. M. McGowan, A. Riedy, J. T. Siegel, K. W. Taylor, E. Thorbecke, L. Williams, J. U. Wolff, D. K. Wyatt Emeritus: R. Baker, R. B. Jones, G. McT. Kahin, S. J. O'Connor, O. W. Wolters.

Southeast Asia studies at Cornell is included within the framework of the Department of Asian Studies. Sixteen full-time core faculty members in the colleges of Arts and Sciences, Business and Public Administration, and Agriculture and Life Sciences participate in an interdisciplinary program of teaching and research on the history, culture, and societies of the region stretching from Burma through the Philippines. An additional thirty-seven lecturers and other faculty provide language and area instruction on Southeast Asia. Courses are offered in such fields as agricultural economics, anthropology, Asian studies, economics, finance, government, history, history of art, linguistics, music, and rural sociology. Instruction is also offered in a wide variety of Southeast Asian languages: Burmese, Cambodian, Cebuano (Bisayan), Indonesian, Javanese, Tagalog, Thai, and Vietnamese, for which Foreign Language Area Studies Fellowships are available to U.S. citizens. The formal program of study at Cornell is enriched by a diverse range of extracurricular activities, including an informal weekly brown bag seminar and concerts of the Gamelan Ensemble. The George McT. Kahin Center for Advanced Research on Southeast Asia is also the site for public lectures as well as publication and outreach activities related to this area. The John M. Echols Collection on Southeast Asia, in Kroch Library, is the most comprehensive collection on this subject in America.

Undergraduates may major in Asian studies with a focus on Southeast Asia and its languages, or they may elect to take a concentration in Southeast Asia studies by completing 18 credits of course work. Graduate students may work toward an M.A. degree in Southeast Asian studies or pursue a Master of Professional Studies in another school with a concentration in Southeast Asian studies. Ph.D. students specializing in Southeast Asia receive a doctorate in a discipline such as history, anthropology, or city and regional planning.

Additional information is available on the Internet at: <http://www.einaudi.cornell.edu/southeastasia>. Inquires for further information should be directed to the program office, 180 Uris Hall.

**Statistical Science Department**

The university-wide Department of Statistical Science coordinates undergraduate and graduate study in statistics and probability. A list of suitable courses can be found in the section, "Interdisciplinary Centers, Programs, and Studies," in the front of this catalog.

**Women's Studies Program**

Kathy Abrams, acting director; J. E. Gainor, director of undergraduate studies; D. Castillo and M. B. Norton, director of graduate studies; L. Abel, K. Abrams, A. Adams, N. Assie-Lumumba, K. Barzman, P. Becker, S. Bem, L. Beneria, A. Berger, J. Bernstock, L. Bogel, Laura Brown, Lois Brown, J. Brumberg, C. Chase, B. Correll, I. DeVault, J. Farley, S. Feldman, J. Fortune, N. Furman, J. Ginsburg, S. Greene, E. Hanson, K. Haines-Eitzen, N. Hirschmann, M. Hite, D. Holmberg, P. Hyams, B. J. Isbell, M. Jacobus, J. Jennings, K. Jones, M. Katzenstein, C. Lazzaro, K. March, C. A. Martin, S. McConnell-Ginet, D. Mermin, M. Migiel, M. Murphy, M. B. Norton, B. Olguin, S. Orlov, J. Peraino, K. Raver, J. Reppy, M. Rossiter, S. Sangren, R. Savin-Williams, K. Shanley, R. Schneider, A. M. Smith, A. Villerajo, M. Washington, R. Weil, B. Wejnert, J. Whiting, S. Wong

**Introduction to the Program**

Women's Studies is an interdisciplinary program that seeks to deepen understanding of women's lives, culture, and history, in all their complex multiplicities. Transformative as well as additive, women's studies challenges us to re-examine much of what we think we already know by providing an intellectual—and critical—feminist framework through which to view the many interconnections among gender, knowledge, and power. Thus, central to the curriculum in women's studies are such overarching notions as these:

- that definitions of gender—including those that privilege exclusive heterosexuality—are not natural or universal but are instead social constructions that vary across time and place, serve political ends, and have ideological underpinnings;
- that systems of gender inequality interact with other social inequalities, including those of class, race, ethnicity, sexual preference, and Western vs. non-Western cultures; and
- that even the most current knowledge derived from the humanities, social sciences, and natural sciences is not as impartial, objective, or neutral as has traditionally been thought but instead emerges out of particular historical and political contexts.

Although all Women's Studies courses except writing seminars count toward the major, they do not all satisfy distribution requirements or count toward the total hours required in Arts and Sciences; if a course is not cross-listed with another Arts and Sciences department, be sure to check with college offices about whether it will satisfy distribution or our requirements for Arts and Sciences.

**Program Offerings**

The Women's Studies Program offers an undergraduate major, an undergraduate concentration, and a graduate minor. Undergraduate students in the College of Arts and Sciences who want to major in women's studies can apply directly to the program. Undergraduate students in other colleges at Cornell will need to work out special arrangements and should speak to the



Director of Undergraduate Studies (DUS) in Women's Studies.

### The Undergraduate Major

The questions posed by feminist inquiry cannot be answered from within any single discipline or even from a simple combination of two or more disciplines. For that reason, the women's studies major provides students with a basic groundwork in the interdisciplinary field of women's studies and then requires each student to construct an advanced and individually tailored program of study on a topic, in a discipline, or in a combination of disciplines of special interest to the student alone.

Rather than specifying a particular sequence of required courses for each and every student, the women's studies major gives students a starting point in women's studies, an active advisory structure to help them shape a curriculum, and an ongoing impetus to reflection about their entire program of undergraduate study.

In designing their major, students should keep in mind that there are not many graduate programs offering a degree in women's studies itself. Accordingly, undergraduates wishing to major in women's studies should talk at length with a faculty member about how to design a program of study that will best qualify them for entry into either a job or a postgraduate degree program when they leave Cornell. To give one example of what needs to be considered in designing a major: Undergraduates who might want to do graduate study within a discipline will need to develop a certain level of disciplinary specialization at the undergraduate level. This can be done either by supplementing the women's studies major with a carefully selected cluster of courses in that discipline or by pursuing a double major.

### Requirements for a Women's Studies Major

1. Prerequisite courses: before applying to the major, the student must complete any two Women's Studies courses with a grade of B- or better. Some suggested entry-level courses for 1998-99 include: 206, 210, 234, 244, 263, 269, 273, 277, and 285. These courses would count both as prerequisites and as part of the women's studies major. Freshman writing seminars, in contrast, would count as prerequisite courses but not as part of the major.
2. Required course work:
  - a. A minimum of 36 credits in women's studies is required for the major. No course in which the student has earned less than a C- can count toward these 36 credits. Although there is no single women's studies course that is required of all students, every major must complete a program of study that is both graduated in difficulty and interdisciplinary in scope—a program, in other words, that reflects both the breadth and the depth of women's studies scholarship. This program of study must be developed in consultation with the student's adviser in women's studies and must include advanced seminars at the 300 level or above.

- b. Students may count up to three courses outside women's studies toward the major if those courses are approved by the student's women's studies adviser as constituting a meaningful component of the student's women's studies curriculum. To facilitate the coordination of a women's studies major with other majors in the college, students may also count toward the major up to three women's studies courses that are simultaneously being counted toward a second major.
3. The Honors Program: to graduate with honors, the major in women's studies must complete a senior thesis under the supervision of a women's studies faculty member and defend that thesis orally before an honors committee. To be eligible for honors, students must have at least a cumulative grade point average of 3.0 in all coursework and a 3.3 average in all courses applying to their women's studies major. Students interested in the Honors Program should consult the Director of Undergraduate Studies (DUS) late in the spring semester of their junior year or very early in the fall semester of their senior year. For more information about the Honors Program, see WOMNS 400 and the "Guidelines For a Senior Honors Thesis" available in the Women's Studies Program office.

### The Women's Studies Concentration

Undergraduate students in any college at Cornell can concentrate in Women's Studies in conjunction with a major defined elsewhere in the university. The concentration consists of four courses in Women's Studies completed with a grade of C- or above, no more than two of which can come from a single discipline and none of which should overlap with the major. In rare cases, the DUS may allow one class from within a student's major to count toward the requirements for the concentration. Students should not assume the waiver will be granted, and they must petition the DUS with this request before the beginning of their final semester of study. Freshman writing seminars cannot be included within the four required courses. Students wishing to concentrate in Women's Studies should see the DUS.

### The LBG Concentration

Women's Studies serves as home to the Lesbian, Bisexual, and Gay Studies Program, which offers an undergraduate concentration as well as a graduate minor. The LBG undergraduate concentration consists of four courses. The Women's Studies courses that may be used to fulfill the LBG concentration are 210, 244, 262, 277, 285, 321, 353, 355, 376, 377, 413, 415, 427, 433, 450/650, 441/641, 465, 467, 468, 493, 621, 626, 654, and 656. For a complete listing of all courses that will fulfill this concentration please see the LBG Studies portion of this catalog.

### I. Freshman Writing Seminars

- [WOMNS 105 Feminine and Masculine Ideals in Japanese Culture (also Asian Studies 105)]**  
3 credits. Not offered 1998-99. Staff.]

### WOMNS 106 FWS: Women and Writing (also English 105)

Fall and spring. 3 credits. Staff.  
For description, see ENGL 105.

### [WOMNS 107 FWS: Women Living on the Edge (also Society for the Humanities 106)]

3 credits. Not offered 1998-99. S. Orlov.]

### [WOMNS 109 FWS: Gendered Imaginations in African History and Literature (also History 109)]

3 credits. Not offered 1998-99. Next offered fall 1999-00. S. Greene.]

### [WOMNS 167 FWS: Masculinity in Light of Feminism (also Anthropology 167)]

3 credits. Not offered 1998-99. R. Philen.]

### [WOMNS 178 FWS: Desire (also English 178)]

3 credits. Not offered 1998-99.  
E. Hanson.]

### WOMNS 190 FWS: When a Girly Girl Meets a Manly Man: Gender & Tales of Love (also Theatre, Film, and Dance 190)

Fall and spring. 3 credits. T. Rhys.  
For description, see THETR 190.

### II. Courses

### WOMNS 206 Gender and Society (also Rural Sociology 206)

Spring. 3 credits. B. Wejnert.  
For description, see R SOC 206.

### WOMNS 210 Introduction to Feminist Theory

Fall. 4 credits. A. Villarejo.  
This course introduces students to critical approaches in feminist scholarship to the cultural, socioeconomic, and political situation(s) of women. Particular attention will be paid to the conceptual challenges and dangers posed by attempts to study women without taking account of relations between race, class, and gender in ideological and social formations. Readings will draw on work in various disciplines and will include literary texts and visual images.

### WOMNS 214 Biological Basis of Sex Differences (also Biological Sciences 214 and Biology and Society 214)

Fall. 3 credits. J. Fortune.  
For description, see BIO AP 214.

### [WOMNS 227 Men and Women in Modern America (also History 227)]

4 credits. Not offered 1998-99. Next offered fall 1999-00. M. B. Norton.]

### WOMNS 234 Gender in Early Modern Europe (also History 234) #

Fall. 4 credits. R. Weil.  
For description, see HIST 234.

### [WOMNS 238 The Historical Development of Women as Professionals, 1800-Present (also Human Development and Family Studies 258, American Studies 258, and History 238) #

3 credits. Not offered 1998-99.  
J. Brumberg.]

### [WOMNS 243 Inside-Out: The American Everyday Interior (also Design and Environmental Analysis 243)]

3 credits. Not offered 1998-99.  
J. Jennings.]

**WOMNS 244 Language and Gender Relations (also Linguistics 244)**  
Spring. 4 credits. S. McConnell-Ginet.  
For description, see LING 244.

**[WOMNS 249 Feminism and Philosophy (also Philosophy 249)]**  
4 credits. Not offered 1998-99.  
J. Whiting.]

**[WOMNS 251 Twentieth-Century Women Novelists (also English 251)]**  
4 credits. Not offered 1998-99.  
S. Samuels.]

**[WOMNS 263 Interpreting Melodrama and the Woman's Film (also English 263)]**  
4 credits. Not offered 1998-99. L. Bogel.]

**[WOMNS 269 Introduction to Feminist Political Thought (also Government 369)]**  
4 credits. Not offered 1998-99. Next offered fall 1999-00. N. Hirschmann.]

**[WOMNS 273 Women in American Society, Past and Present (also History 273)] #**  
4 credits. Not offered 1998-99. Next offered spring 1999-00. M. B. Norton.]

**WOMNS 277 Social Construction of Gender (also Psychology 277)**  
Fall. 3 credits. S. Bem.  
For description, see PSYCH 277.

**WOMNS 285 Introduction to Sexual Minorities (also Human Development and Family Studies 284)**  
Fall. 3 credits. R. Savin-Williams.  
For description, see HDFS 284.

**WOMNS 296 Gender and Sexuality in Early Christianity (also Near Eastern Studies 296 and Religious Studies 297)**  
Spring. 3 credits. K. Haines-Eitzen.  
For description, see NES 296.

**[WOMNS 305 Emotion, Gender, and Culture (also Anthropology 305)] @**  
4 credits. Not offered 1998-99.  
B. J. Isbell.]

**WOMNS 307 African-American Women in Slavery and Freedom (also History 303 and Africana Studies 307) #**  
Spring. 4 credits. M. Washington.  
For description, see HIST 303.

**WOMNS 321/621 Sex and Gender in Cross-Cultural Perspective (also Anthropology 321/621) @**  
Fall. 4 credits. K. March.  
For description, see ANTHR 321/621.

**WOMNS 341 Ethical Theory (also Philosophy 341)**  
Spring. 4 credits. K. Jones.  
For description, see PHIL 341.

**[WOMNS 349 Readings in Feminist Literary Theory (also English 349)]**  
4 credits. Not offered 1998-99. M. Hite.]

**WOMNS 350 Women and Patronage in Islam (also Near Eastern Studies 350)**  
Spring. 4 credits. D. Ruggles.  
For description, see NES 350.

**WOMNS 353 Feminism: State and Public Policy (also Government 353)**  
Fall. 4 credits. M. Katzenstein.  
For description, see GOVT 353.

**[WOMNS 355 Decadence (also English 355)] #**  
4 credits. Not offered 1998-99. Next offered fall 1999-00. E. Hanson.]

**[WOMNS 357 American Families in Historical Perspective (also History 359, American Studies 359 and Human Development and Family Studies 359)]**  
3 credits. Not offered 1998-99.  
J. Brumberg.]

**[WOMNS 358 20th-Century Experimental Fiction by Women (also English 358)]**  
4 credits. Not offered 1998-99. M. Hite.]

**[WOMNS 362 Global Perspectives on Gender @**  
4 credits. Not offered 1998-99.  
N. Assie-Lumumba.  
The course will examine how forms of gender inequality have been shaped by international forces and structured by differences in national histories. The class will be taught by a rotating set of two faculty members from different departments. Contingent on the particular faculty directing the course, the class will consider such issues as cross-cultural perspectives on gender; the history of work and family life in different societies; the gendered division of labor in local, national, and international economies; the impact of colonialism; the organized efforts of women to define gender relations; the role of the state in constructing an engendered economy and polity.]

**[WOMNS 363 Representations of Women in Ancient Greece and Rome (also Classics 363 and History 367) #**  
4 credits. Not offered 1998-99. Next offered spring 1999-00. J. Ginsburg, L. Abel.]

**WOMNS 365 Topics in Social and Personality Development: The Psychological Development of Women (also Human Development and Family Studies 365)**  
Spring. 3 credits. C. Raver.  
For description, see HDFS 365.

**WOMNS 366 Women at Work (also Industrial and Labor Relations: Human Resources 366)**  
Spring. 3 or 4 credits. J. Farley.  
For description, see ILRHR 366.

**WOMNS 370 19th-Century Novel (also English 370) #**  
Spring. 4 credits. E. Hanson.  
For description, see ENGL 370.

**[WOMNS 374 Nineteenth-Century American Women Writers (also English 374 and American Studies 374) #**  
4 credits. Not offered 1998-99. L. Brown.]

**WOMNS 380 Gender, Ideology, and Culture (also Sociology 380)**  
Spring. 4 credits. P. Becker.  
For description, see SOC 380.

**[WOMNS 381 19th Century French Women Writers (also French Literature 381) #**  
4 credits. Not offered 1998-99. A. Berger.]

**[WOMNS 384 History of Women and Unions (also Industrial & Labor Relations 384)]**  
4 credits. Not offered 1998-99. Next offered 1999-00. I. DeVault.]

**WOMNS 400 Senior Honors Thesis**  
Fall and spring. 2-4 credits. For Women's Studies seniors only. Permission of Women's Studies faculty member required. Student must carry a GPA of 3.0 in all subjects and a 3.3 in Women's Studies. Staff.

Both the form of theses, and the nature and extent of contact between student and adviser, will depend on mutual agreement between the two. In one common scenario, the student will write an essay of approximately 50 pages in length, drafted and revised in a series of carefully planned stages over the course of two semesters, with an outline expected on approximately Sept. 15th and a draft of the first chapter on approximately November 15th. An "R" grade will be assigned at the end of the fall semester and a letter grade on completion of the project at the end of the spring semester.

**WOMNS 404 Women Artists (also History of Art 466) #**  
Spring. 4 credits. J. Bernstock.  
For description, see ART H 466.

**[WOMNS 405/605 Domestic Television]**  
4 credits. Not offered 1998-99.  
A. Villarejo.

This course is a seminar on television as technology and cultural form, focusing on the "domestic" as a synonym for gendered value-coding, an axis of the international division of labor (and questions of television's dissemination and circulation), and a site for historical exploration. The course balances readings in television and cultural theory (Spigel, Dienst, Merck, Williams, Feuer, Modleski, Mellencamp, Shattuck, Spivak and others) with close analysis of television as information, entertainment, furniture, technology, text, genre, flow, channel, and circuit of production of the commodity audience. Students may enroll in either undergraduate or graduate level with graduate students submitting a longer paper and doing supplementary readings.]

**WOMNS 406 The Culture of Lives (also Anthropology 406) @**  
Spring. 4 credits. K. March.  
For description, see ANTHR 408.

**WOMNS 408 Gender Symbolism (also Anthropology 408)**  
Spring. 4 credits. K. March.  
For description, see ANTHR 408.

**WOMNS 409/609 Misogyny and Its Readers (also Italian 409/609 and Comparative Literature 449/649)**  
Fall. 4 credits. M. Migiel.  
For description, see ITALIT 409/609.

**WOMNS 415 Race, Gender and Organization (also Government 415)**  
Spring. 4 credits. M. Katzenstein and J. Reppy.  
For description, see GOVT 415.

**WOMNS 420 Race in Biomedical Constructions of Woman (also Society for the Humanities 429)**  
Fall. 4 credits. M. Murphy.  
What is a woman? Is there such a thing as race? Using feminist theory and historical case studies, this course critically explores the cultural work of "race" in scientific constructions of "woman" in twentieth-century America. Race is deeply inscribed in the ways biomedicine conceives of and deals with women's bodies, both white women and

women of color. We will unpack claims of a biological underpinning for both race and gender and try to untangle the ways race has been used to define difference amongst women. To give our conversations focus, we will read feminist theory on the relationships between race, gender, and difference against five historical case studies, which will include: motherhood and eugenics, sexually transmitted diseases and AIDS, the politics of breast cancer, birth control and reproductive rights, and the feminist health movement.

**WOMNS 427 Shakespeare: Gender, Sexuality, Cultural Politics (also English 427) #**

Spring. 4 credits. B. Correll.  
For description, see ENGL 427.

**[WOMNS 431 Scenes of Female Enlightenment (also English 431) # @**  
4 credits. Not offered 1998–99.  
M. Jacobus.]

**[WOMNS 433 The Female Dramatic Tradition (also Theatre Arts 436)**  
4 credits. Not offered 1998–99. Offered every 3 years. J. E. Gainor.]

**WOMNS 438 Female Adolescence in Historical Perspective, 1815–1960 (also Human Development and Family Studies 417 and History 458) #**

Spring. 3 credits. J. Brumberg.  
For description, see HDFS 417.

**WOMNS 441/641 Theatre of Commodities: Feminism, Advertising, T.V., and Performance (also Theatre Arts 439)**

Spring. 4 credits. A. Villarejo and R. Schneider.

This course will explore the employment of bodies and objects as representational emblems of value and desire in late capitalism. We will analyze the ways in which desire circulates through print advertising, television, and the avant-garde. We will examine socio-cultural constructions of the relationship between screen bodies and live bodies, especially as involves advertising and audience. We will explore conceptual and cultural inscribed spaces between notions of desire, fulfillment, deferral, and value coding. Throughout, feminist analysis of gender construction and deployment in the realms of the market, popular culture, and "high" art will frame our inquiry. Finally, we will ask questions about the problematic of interventionary tactics in art and popular culture relative to consumption and commodity aesthetics. The course will draw on Williamson, Marx, Benjamin, Freud, Irigaray, de Certeau, Baudrillard, Dienst, Goldman, McClintock, Bordieu, Friedan, Haug, Lee, Fiske, Goffman, Lears, Murray, Taylor and others as well as numerous print advertisements, television texts, and performance artwork.

**[WOMNS 442 Feminist Politics and Policies in the United States and Western Europe (also Government 442)**

4 credits. Not offered 1998–99.  
M. Katzenstein/U. Liebert.]

**WOMNS 443 The Novels of George Eliot (also English 444)**

Fall. 4 credits. C. Chase.  
For description, see ENGL 444.

**[WOMNS 444 Historical Issues of Gender and Science (also Science and Technology Studies 444)**

4 credits. Not offered 1998–99.  
M. Rossiter.]

**[WOMNS 447 Reading Freud: Gender, Race, and Psychoanalysis (also German Studies 447 and Comparative Literature 447)**

4 credits. Not offered 1998–99. B. Martin.]

**[WOMNS 448/648 Boccaccio: Gender, Power, and the Medieval Text (also Italian Literature 445/645 and Comparative Literature 456) #**

4 credits. Not offered 1998–99. M. Migiel.]

**WOMNS 450/650 The Lenses of Gender (also Psychology 450/650)**

Spring. 4 credits. S. Bem.  
For description, see PSYCH 450/650.

**[WOMNS 451 Women in Italian Renaissance Art (also Art History 450) #**

4 credits. Not offered 1998–99.  
C. Lazzaro.]

**WOMNS 457 The Sexed Body in Western Art (also History of Art 457)**

Fall. 4 credits. K. Barzman.  
For description, see ART H 457.

**WOMNS 459 Education in Africa and the Diaspora (also Africana 459) @**

Fall. 4 credits. N. Assiè-Lumumba.  
For description, see AS&RC 459.

**[WOMNS 461 Feminist Epistemology (also Philosophy 461)**

4 credits. Not offered 1998–99. K. Jones.]

**[WOMNS 464 Gender and Politics in the Roman World (also Classics 463 and History 463)**

4 credits. Not offered 1998–99. Next offered fall 1999–00. J. Ginsburg.]

**[WOMNS 465 Feminist Theory/Lesbian Theory**

4 credits. Not offered 1998–99.  
C. A. Martin.]

**[WOMNS 466 Feminism and Gender Discrimination (also Government 466 and Law 648)**

4 credits. Not offered 1998–99.  
K. Abrams.]

**WOMNS 467 Sexual Minorities and Human Development (also Human Development and Family Studies 464)**

Spring. 3 credits. R. Savin-Williams.  
For description, see HDFS 464.

**[WOMNS 468 Radical Democratic Feminisms (also Government 467)**

4 credits. Not offered 1998–99. Next offered fall 1999–00. A. M. Smith.]

**[WOMNS 471 American Indian Women's Literature (also English 471)**

4 credits. Not offered 1998–99. Next offered fall 1999–00. K. Shanley.]

**WOMNS 478 Family and Society in Africa (also Africana 478) @**

Fall. 4 credits. N. Assiè-Lumumba.  
For description, see AS&RC 478.

**[WOMNS 479 Women and Gender Issues in Africa (also Africana 479) @**

4 credits. Not offered 1998–99.  
N. Assiè-Lumumba.]

**WOMNS 480 The Body in American Feminism (also Society for the Humanities 489)**

Spring. 4 credits. M. Murphy.  
This course traces the changing place of the body as a site of political struggle in the last three decades of American feminism. How has late-twentieth-century feminism engaged, in theory and practice, with the body? Of central concern will be the complexity of ways feminists have critiqued medical and technoscientific interpretations of women's bodies. We will investigate the troubled relation between the body and the question, "what is a woman?" We will also unpack how medical technologies have changed political valences in different feminisms. At stake in our explorations is how to critically engage the materiality of the body in an age of technoscience. Reading and interpreting feminist theory, health guides, movies, and manifestos from the late 1960's up until the present, we will take up these questions in three topics—the women's health movement, reproductive technologies, and cyborg feminism.

**[WOMNS 481 Latin American Women Writers (also Spanish 492 and Comparative Literature 482) @**

4 credits. Not offered 1998–99.  
D. Castillo.]

**WOMNS 485 Encountering Women's Studies: Perspectives from the Disciplines**

Fall. 4 credits. S. Greene.  
What impact has women's studies had on pre-existing ways of thinking and knowing in such disciplines as history, psychology, sociology, linguistics? Readings and discussions will analyze the role of women's studies as it has challenged the disciplines and has in turn been challenged by scholars and non-scholars alike.

**WOMNS 489 Chicana Renaissance (also English 490)**

Spring. 4 credits. B. Olguin.  
For description, see ENGL 490.

**WOMNS 491 Honors Seminar I: Women's Writing, Revolution and Romance (also English 491) @**

Fall. 4 credits. M. Jacobus.  
For description, see ENGL 491.

**[WOMNS 493 French Feminisms (also French 493)**

4 credits. Not offered 1998–99. A. Berger.]

**WOMNS 496 Women and Music (also Music 493)**

Spring. 4 credits. J. Peraino.  
For description, see MUSIC 493.

**WOMNS 499 Directed Study**

Fall and spring. Variable credit. Prerequisites: one course in women's studies and permission of a faculty member of the Women's Studies Program Board. Staff.

**[WOMNS 502 Education and Development in Africa (also Africana 502)**

4 credits. Not offered 1998–99. Next offered spring 1999–00.  
N. Assiè-Lumumba.]

**[WOMNS 530 Womanist Writing in Africa and the Caribbean (also Africana 530) @**

4 credits. Not offered 1998–99.  
A. Adams.]

**[WOMNS 600 Special Topics in Feminist Theory: An Interdisciplinary Graduate Course in Women's Studies]**

4 credits. This course is open to graduate students and undergraduate seniors who have obtained permission of instructor. Not offered 1998-99. Next offered fall 1999-00. Staff.

The purpose of this course is to expose graduate students to interdisciplinary approaches in Women's Studies and feminist theory to a variety of topics or questions. While many of our graduate courses train students in highly specialized areas of feminist theory, this course aims to teach students how to find common intellectual ground around a single topic from interdisciplinary perspectives without sacrificing the complexity of any disciplinary approach. The course is designed for graduate minors in Women's Studies and students with a specialized interest in feminist theory. Although it is not required, the course is strongly recommended for students obtaining a graduate minor in Women's Studies.]

**[WOMNS 608 African-American Women (also History 608)]**

Spring. 4 credits. M. Washington.  
For description, see HIST 608.

**[WOMNS 613 The Political Economy of Gender and Work (also City and Regional Planning 613)]**

3 credits. Not offered 1998-99.  
L. Beneria.]

**[WOMNS 626 Graduate Seminar in the History of American Women (also History 626)]**

Spring. 4 credits. M. B. Norton.  
For description, see HIST 626.

**[WOMNS 636 Comparative History of Women and Work (also Industrial and Labor Relations 636)]**

Spring. 4 credits. I. DeVault.  
For description, see ILR 636.

**[WOMNS 644 Topics in the History of Women in Science (also Science and Technology Studies 644)]**

Fall. 4 credits. M. Rossiter.  
For description, see S&TS 644.

**[WOMNS 654 Queer Theory (also English 654)]**

Spring. 4 credits. E. Hanson.  
For description, see ENGL 654.

**[WOMNS 656 Decadence (also English 655 and Comparative Literature 655)]**

4 credits. Not offered 1998-99.  
E. Hanson.]

**[WOMNS 660 Gender in Nineteenth-Century America (also English 661)]**

4 credits. Not offered 1998-99.  
S. Samuels.]

**[WOMNS 670 Feminist Political Theory (Graduate Seminar) (also Government 671)]**

Spring. 4 credits. N. Hirschmann.  
For description, see GOVT 671.

**[WOMNS 671 Feminist Methods (also Rural Sociology 671)]**

4 credits. Not offered 1998-99. Next offered fall 1999-00. S. Feldman.]

**[WOMNS 685 Reconstructing the Era: Nineteenth-Century African American Women's Literature and Society (also English 685)]**

4 credits. Not offered 1998-99. L. Brown.]

**[WOMNS 692 Hispanic Feminisms (also Romance Studies 690)]**

4 credits. Not offered 1998-99.  
D. Castillo.]

**[WOMNS 699 Topics in Women's Studies]**

Fall and spring. Variable credits. Staff.  
Independent reading course for graduate students on topics not covered in regularly scheduled courses. Students develop a course of readings in consultation with a faculty member in the field of Women's Studies who has agreed to supervise the course work.

**[WOMNS 733 Literary Anti-Feminism (also English 733)]**

4 credits. Not offered 1998-99. L. Brown.]

## FACULTY ROSTER

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Barazangi, Muawia, Ph.D., Columbia U. Senior Scientist, Geological Sciences/INSTOC#  
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- Hirschmann, Nancy, Ph.D., Johns Hopkins U. Assoc. Prof., Government
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